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VOLUME 23

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EDITORIAL NOTE

Attention is invited to Entry No. 3997, which lists for the first time *Electroencephalography and clinical neurophysiology*, an international journal containing studies of the electrical activity of the brain and other aspects of the physiology of the nervous system or neuromuscular system. Each issue also contains an index to literature.

GENERAL

3969. [Anon.] Canadian theses in psychology, 1948. *Canad. J. Psychol.*, 1949, 3, 44-46.

3970. Cantril, Hadley. (Princeton U., N. J.) Toward a scientific morality. *J. Psychol.*, 1949, 27, 363-376.—The author states his problem thus: "Many of us in the human sciences feel that we must assume our share in the many varieties of group tension around us. Those of us who do feel this way are apt to feel frustrated because of our inability to make any demonstrable dent on the course of affairs. And many of us who share these feelings may not have adequately intellectualized to ourselves why it is that we believe we, as self-appointed experts on this thing called 'human nature,' are in a position to help decide what is 'right' and what is 'wrong.'" His principal sections are: man in evolutionary perspective, perception and value-judgment, and judging what is "right." Further, the social scientist cannot be impartial; "any interpretation is a value judgment and any pretense of impartiality is more than likely to lead only to social irresponsibility." He concludes: "The social scientist today, I believe, should try to accomplish a radical shift in his thinking. Real progress in any science comes not merely by 'adding to' existing knowledge but by becoming aware of our assumptive worlds, conscious of their inadequacy, destroying and disintegrating them, and then rebuilding them in the constant search for more adequate formulations."—R. W. Husband.

3971. Knight, Rex, & Knight, Margaret. (U. Aberdeen, Scotland.) A modern introduction to psychology. London: Univ. Tutorial Press, 1948. 242 p. 7s.6d.—An introductory text in psychology intended for the general reader as well as for university students. Physiological psychology; the psychology of the cognitive processes; and dynamic psychology, including motivation, conscious and unconscious, and the conditions of mental health, are considered. Each chapter contains Notes on Reading as an aid to further study.—A. J. Sprow.

[See also abstract 4225.]

THEORY & SYSTEMS

3972. Coster, Sylvain de. L'hypothèse du phénomène de rupture. (The hypothesis of the phenomenon of rupture.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 76-105.—The hypothesis of the phenomenon of rupture is raised against the abusive use of the theory of evolution in psychology. The view that the ontogenetic development of the individual recapitulates the phylogenetic development of his species has only limited application in psychology, primarily on the physiological side. The influences of social institutions and culture which to a large extent govern the psychological development of the maturing individual are not correlated with the biological genesis of the species.—R. J. Ellingson.

3973. Frank, Lawrence K. (Caroline Zachry Inst. of Human Development, New York.) Foreword. *Ann. N. Y. Acad. Sci.*, 1948, 50, 189-196.—This foreword is the introductory paper presented to the Conference on Teleological Mechanisms, held by the New York Academy of Sciences on October 21 and 22, 1946.—S. Ross.

3974. Hutchinson, G. Evelyn. (Yale U., New Haven, Conn.) Circular causal systems in ecology. *Ann. N. Y. Acad. Sci.*, 1948, 50, 221-246.—Two major approaches are described: the biogeochemical and the biodemographic, as aspects or circular causal systems in ecology.—S. Ross.

3975. McCulloch, Warren S. (U. Ill. Coll. Med., Chicago.) A recapitulation of the theory, with a forecast of several extensions. *Ann. N. Y. Acad. Sci.*, 1948, 50, 259-274.—The writer reviews certain aspects of the theory of teleological mechanisms and indicates directions in which progress is to be expected.—S. Ross.

3976. Mallart, José. Integración de escuelas psicológicas y estudio del comportamiento. (Integration of psychological schools and the study of behavior.) *Rev. Psicol. gen. aplic.*, Madrid, 1948, 3, 307-317.—Gemelli and Zunini are to be commended for their attempt to present in their recent book, "Introduzione al Psicologia," an eclectic viewpoint in which the integration of material is stressed.—A. J. Smith.

3977. Snycg, Donald. (Oswego State Teachers Coll., N. Y.) Predicting the behavior of individuals. *Canad. J. Psychol.*, 1949, 3, 19-29.—The utility of the phenomenological approach for the prediction of behavior is examined. It is assumed that (1) all behavior is lawful, and (2) behavior is determined by the phenomenal field at the moment of action.

On these bases, prediction is derived from: (1) reconstructing the individual's behavior field by inference from observing his behavior; (2) projecting future fields by discovering the nature of present phenomenal fields; and (3) predicting future behavior from the projected future field. The advantages of this approach are discussed.—*J. W. Bowles, Jr.*

METHODS & APPARATUS

3978. Arellano, Alejandro P. (*Massachusetts Gen. Hosp., Boston.*) A tympanic lead. *EEG clin. Neurophysiol.*, 1949, 1, 112-113.—An S shaped silver tube 6 cm. \times 2.5 mm. insulated to its felt covered tip is inserted 3.5 cm. into the external auditory canal at which point it lies next to the tympanic membrane. Such an electrode is useful for recording potentials from the inferior surface of the temporal lobe. When used with pharyngeal leads (see 23: 3986) a line of electrodes across the base of the brain is obtained.—*C. E. Henry.*

3979. Bickford, R. G. (*Mayo Clinic, Rochester, Minn.*) An automatic electrode combination selector switch. *EEG clin. Neurophysiol.*, 1949, 1, 109-110.—A 17-pole 11-position switch has been appropriately wired in to an 8 channel Grass EEG so that a variety of predetermined electrode combinations can be selected at will. It is also connected to a series of diagrams which are selectively illuminated on a visual indicator panel.—*C. E. Henry.*

3980. Foster, Dean (*Cornell U., Ithaca, N. Y.*), Smith, L. A., & Scofield, E. H. Un nuevo estimulador olfatorio dirrínico. (A new dirrhinc olfactory stimulator.) *Rev. Psicol. gen. aplic., Madrid*, 1948, 3, 339-342.—This is a translation of an article that originally appeared in the *Amer. J. Psychol.* (see 21: 3400).—*A. J. Smith.*

3981. Guillaume, P. Peut-on décrire un phénomène. (Can a phenomenon be described?) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 2-12.—The author considers the question of the reliability of subjective report or description as a method in science, and concludes that the value of descriptions should be determined by their practical usefulness in diagnosis and prognosis.—*R. K. Meister.*

3982. Harker, George S. (*Tufts Coll., Medford, Mass.*) A subject-paced stencil scorer. *Amer. J. Psychol.*, 1948, 61, 552-558.—This scoring device was developed for use in a study in which it was necessary to obtain both time- and error-scores from a polygraph strip, the strip being a record of S's finger-key responses. 3 diagrams illustrate the essential features, the pacing mechanism, and the pacer and polygraph circuits. A somewhat detailed description of the operation of this apparatus is provided.—*S. C. Ericksen.*

3983. Hunter, John, & Jasper, Herbert H. (*Montreal Neurological Institute, Can.*) A method of analysis of seizure pattern and electroencephalogram; a cinematographic technique. *EEG clin.*

Neurophysiol., 1949, 1, 113-114.—Perfectly synchronized photography of the clinical and electrical aspects of epilepsy is achieved by an optical system which reflects both phenomena onto the same frame of 16 mm. color film. "The use of such a system as this makes possible the evaluation of many factors important in epilepsy, and which otherwise would be frequently missed because of difficulties in observation and recording."—*C. E. Henry.*

3984. Katz, David. (*U. Stockholm, Sweden.*) Lo scriptocronografo. (The scriptochronograph.) *Arch. Psicol. Neurol. Psychiat.*, 1948, 9, 395-402.—Described and pictured is an instrument called the scriptochronograph which records with precision the time relations in handwriting. The writing is obtained in an electrolytic manner on a card prepared chemically. By means of an apparatus which permits the making and breaking of circuit at variable speeds, a writing is obtained in which the letters are formed of dots with intermediate spaces varying in length with the speed of opening and closing of the electric circuit. The instrument is thought of value in the psychotechnical analysis of the time necessary for executing a movement, in the characterological analysis of handwriting, in the neurological study of tremor, etc.—*F. C. Sumner.*

3985. Katz, D. Der Skriptochronograph. (The timed-writing recorder.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 31-38; 634-636.—The author describes an apparatus by means of which the time relations in the separate strokes of a subject's handwriting can be determined from the written record. The record paper is chemically sensitized and the mark made as an electric current from the writing stylus passes through the paper to the aluminum plate beneath, catalyzing the mark-making reaction. The second part of the apparatus consists of gear wheel current interrupters run from a constant speed motor which allow a choice of four current interruption rates to record various ranges of writing speed. The written record is then an interrupted line, each dash representing a particular fraction of a second, depending on the interruption rate used. The dashes can then be counted to determine the time for strokes, letters, words. The author points out the usefulness of such timing in handwriting studies. 3 photos of the recorder.—*R. K. Meister.*

3986. MacLean, Paul D. (*Massachusetts Gen. Hosp., Boston.*) A new nasopharyngeal lead. *EEG clin. Neurophysiol.*, 1949, 1, 110-112.—An S shaped silver tube 12.5 cm. \times 2.5 mm. insulated nearly to the tip with Tygon can be used to record the electrical potentials of basal brain structures. It has the following advantages: "(1) ensures good recording without baseline sway; (2) requires no cocaineization of the nasal passages; (3) may be installed in a matter of seconds without the use of nasal speculum or head mirror; (4) is comfortable for the patient; (5) two such leads may be used, one on each side of the nose, for bipolar recordings from the base of the brain; (6) allows the subject of a sleep experiment to

sleep with two such leads in place for a period of several hours." Additional coverage is obtained when 2 such paired leads are used in conjunction with tympanic electrodes (see 23: 3978).—C. E. Henry.

3987. Riggs, Lorrin A. (Brown U., Providence, R. I.), Mote, Frederick A., Mueller, Conrad G., & Graham, Clarence H. Two devices for evaluating stereoscopic reticle-patterns. *Amer. J. Psychol.*, 1948, 61, 545-561.—These two devices were designed to present the operator with a moving target and a stationary reticle similar to those appearing in a stereoscopic rangefinder. (1) The opaque-reticle device: the optical system is diagrammed and described in addition to similar data on the mechanical systems. (2) The illuminated-reticle device: two diagrams are presented with a description of its operating characteristics.—S. C. Ericksen.

3988. Zaragüeta, J. A propos des méthodes psychologiques. (On psychological methods.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 13-30.—This paper is a plea for the reconsideration of psychological method, with a view to the reintroduction of "introspective" and "auto-spective" data, which have been largely ignored under the influence of behaviorism and of techniques of empirical induction and mathematical measurement.—R. J. Ellingson.

[See also abstracts 4065, 4084.]

NEW TESTS

3989. Vetter, August. Der "Auffassungs-test." (The "Apperception Test.") *Grengebiete Med.*, 1948, 1, 22-24.—This is a projective technique which uses 2 black-and-white and 4 color pictures; these are reproduced on one large color plate attached to the article. The test, developed with the aid of E. Wartegg, aims at the content aspect of personality. While all pictures are abstractions, they are not as unstructured as the Rorschach plates; graphological experiences and knowledge of the emotional effects of colors were used in designing them. Picture 1, resembling an abstract mechanical line drawing, is likely to elicit a *rational* interpretation. No. 2, a soft-lined composition of small black dots on white ground, appeals to *sensitivity*. No. 3, a lively black and red ink-blot like silhouette against white ground, stimulates *fantasy*. No. 4, an abstract brown design against yellow-green background, contains structural incongruities and offers an *emotional* challenge. No. 5, a soft composition in red and blue from lightest to darkest hues, is likely to reveal tone and saliency of *feelings*. No. 6, similar in coloring to 5 but featuring geometrical forms, appeals to the most *primitive* personality level. The interpretation is purely qualitative and concerned with the differential appeals to the italicized functions; the test does not claim to afford a complete personality diagnosis.—H. L. Ansbacher.

3990. Warren, Neil D., & Canfield, A. A. (U. Southern California, Los Angeles.) An optometric

aptitude test. *Educ. psychol. Measmt*, 1948, 8, 183-191.—The purpose of the test described in the study is to aid in the selection of students who will succeed in the study of optometry. The test consisting of 5 parts (I Figure checking, II Biographical information and interest, III Mathematics, IV Verbal reasoning and science information, V Graph reading) was validated against average two-year grades obtained in optometry school. Total scores on the test (exclusive of Part II) correlated .60 with this criterion, ($N = 65$). Preliminary data indicate that the test has greater predictive efficiency in optometry training than a standard intelligence examination. The authors suggest the test be used along with other indices of student promise, such as school records and personal interviews.—E. Raskin.

[See also abstract 4201.]

STATISTICS

3991. Bennett, George K., & Doppelt, Jerome E. (Psychological Corp., New York.) The evaluation of pairs of tests for guidance use. *Educ. psychol. Measmt*, 1948, 8, 319-325.—Tests that are used in educational and vocational guidance should measure relatively independent traits and should be highly reliable. T. L. Kelley has devised a method for determining the differential power of two tests which estimates "the proportion of all differences for that pair of tests which will represent true differences in ability." This method is described and its application illustrated in the development of the Differential Aptitude Tests. The technique is highly recommended as a means of evaluating test combinations and in constructing new test batteries.—E. Raskin.

3992. Burt, C. Factor-analysis: its aims and chief results. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 49-75.—The author considers the factorial methods as a useful means of classifying the data of science. He discusses early hypotheses which originated from factorial studies and reaches the conclusion that the methods employed in factorial investigations should be based on the three-factor theory. Factor analysis is seen by the author as essentially a procedure for testing and confirming hypotheses, not for supplying them. It is only a supplement to other scientific methods, not a substitute for them. A summary is made of the factors which seem fairly well established at this time.—H. W. Jacob.

3993. Clark, Kenneth E., & Kriedt, Philip H. (U. Minnesota, Minneapolis.) An application of Guttman's new scaling techniques to an attitude questionnaire. *Educ. psychol. Measmt*, 1948, 8, 215-223.—Guttman's scaling techniques were applied to the Rundquist-Sletto attitude scale of economic liberalism-conservatism which was given to 2 groups of about 150 college students each. Assigning cutting points for computing reproducibilities proved to be difficult and arbitrary. There was,

moreover, little agreement between the 2 samples as to the items which had high reproducibility. Combining response categories as a means of increasing reproducibility was also difficult and subjective. When it was carried out, the new scale reproducibilities failed to meet Guttman's criterion for adequate scale unidimensionality (90% reproducibility), despite the fact that the internal consistency of the Rundquist-Sletto scale is known to be high. Furthermore, very high reproducibility can be obtained by including only very popular and unpopular statements and the method of estimating reproducibility "capitalizes on chance error." In the area of general attitude measurement, "serious limitations may exist" in Guttman's method of scale analysis.—E. Raskin.

3994. Edwards, Allen L. (U. Washington, Seattle.) On Guttman's scale analysis. *Educ. psychol. Measmt*, 1948, 8, 313-318.—The problem of locating cutting points in the use of Guttman's technique of scale analysis is discussed and a method proposed which would reduce the amount of subjectivity in locating these points for items which are not perfectly reproducible. This difficulty, however, is considered minor as compared to the significant problem of the original selection of the set of items for scalability. The basis for Guttman's initial selection of items has not been clarified. Scale analysis enables us to tell "how well we have selected a set of items with respect to homogeneity after they have been selected, [but not] how to select items which will be homogeneous."—E. Raskin.

3995. Moore, T. V. Formal causality and the analysis of the general factor. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 544-561.—The author presents a method of analyzing a table of correlations which helps one to select a group of tests measuring a single factor or identical group of factors, to correct the correlations for irrelevant factors, and to obtain weighted measures of the individual tests, so that the sum will be a good measure of the underlying common factor or group of factors.—H. W. Jacob.

3996. Villar, M., & Martín Sarraide, A. (*Instituto Nacional de Psicotecnia, Madrid, Spain.*) Aplicaciones de la estadística a la psicotecnia. III. Valores característicos de las series. (Applications of statistics to psychotechnics. III. Values characteristic of a series.) *Rev. Psicol. gen. apl.*, Madrid, 1948, 3, 319-337.—This is the second in a series of articles on elementary statistical procedures. It is devoted to a discussion of measures of central tendency.—A. J. Smith.

REFERENCE WORKS

3997. Jasper, Herbert H. [Ed.] (*Montreal Neurological Institute, Can.*) Electroencephalography and clinical neurophysiology, an international journal. Montreal, Can.: Thérien frères. Vol. 1, No. 1, February 1949. Quarterly. \$8 per year.—Co-editor W. Grey Walter, Bruden Neurological

Institute, Bristol, England, and Managing Editor Robert S. Schwab, Massachusetts General Hospital, Boston.

ORGANIZATIONS

3998. Psychological Association of the Province of Quebec. List of members. *Canad. J. Psychol.*, 1949, 3, 50-56.

HISTORY & BIOGRAPHY

3999. [Anon.] Ariens Kapper. *Necrologio. Arch. Psicol. Neurol. Psichiat.*, 1947, 8, 309.—Obituary.

4000. Bentley, Madison. (Palo Alto, Calif.) The new edition of Sherrington's *Integrative Action*. *Amer. J. Psychol.*, 1948, 61, 562-573.—This is a critical examination of the psychological concepts and problems growing out of this book. Changes in psychological thought since the first edition are pointed out.—S. C. Ericksen.

4001. Blum, U. Prof. E. J. Bonaventura. *Urim*, 1947/48, 5, 333-334.—Obituary.

4002. Bonaventura, E. J. Al hitkadmüt hapsik-hotekhnika b'eropa hamaaravit. (About the progress of psychotechnics in Western Europe.) *Urim*, 1948/49, 6, 209-213.—During the last 10 years the psychotechnics have developed with regard to its organization, but the scientific findings are still poor. The opposition to psychotechnics decreased as well on the part of parents as on the part of workers, and in consequence of it the psychotechnics have increased, e. g., (1) vocational guidance in Switzerland, and (2) industrial psychotechnics in France. (1) The most important institution is the "Institution de Psychologie Appliquée" of Dr. Rey in Bern. A less developed side of European psychotechnics is the examination of character; only Mrs. Baumgarten-Tramer deals in Switzerland (Bern) really with this matter. (2) The "Institut de Psychologie Appliquée" in Paris conducted by Prof. Bonnardel is exemplary. It deals rather with psychotechnical examination of manual workers. Testing of workers in the factory, both of new workers and of older ones reduced the failures from 50% to 4%. The late author found everywhere much interest for the development of psychology at the Hebrew University and for the progress of vocational guidance in Jewish Palestine (now Israel).—H. Ormian.

4003. Boring, Mollie D., & Boring, Edwin G. (Harvard U., Cambridge, Mass.) Masters and pupils among the American psychologists. *Amer. J. Psychol.*, 1948, 61, 527-534.—Using the 119 psychologists who have been starred in the first 7 editions of *American Men of Science*, 2 charts are presented to show their principal teachers. 3 tables show: (1) those with one principal teacher, (2) those listing two or more teachers, (3) those without principal teachers. The procedures followed to obtain the information are described as well as the difficulties in chart construction and interpretation.—S. C. Ericksen.

4004. Hurvich, Leo M. (Eastman Kodak Co., Rochester, N. Y.) Alfred Harold Holway: 1905-1948. *Amer. J. Psychol.*, 1948, 61, 586-588.—Obituary.

4005. Nardi, N. Kurt Lewin. *Hahinukh*, 1946/47, 20, 385-402.—Obituary.

4006. Shneerson, F. Prof. E. J. Bonaventura. *Hahinukh*, 1947/48, 21, 129-130.—Obituary.

4007. Tolman, Edward C. Kurt Lewin (1890-1947). *Rev. Psicol. gen. apl.*, Madrid, 1948, 3, 225-233.—Obituary.

4008. [Various.] *Miscellanea psychologica* Albert Michotte. Paris: Librairie Philosophique, 1947. 640 p.—This is a complimentary volume to Professor Albert Michotte of the Catholic University of Louvain on the occasion of his professional jubilee, starting with an account of his professional career and containing a list of all experimental research work done under his direction. In special articles, M. Fauville and David Katz analyze Michotte's personal contributions. In all there are 40 original articles written by well-known European, Canadian, and American scholars. The honorary committee was headed by Queen Elizabeth of Belgium, and the organization committee consisted of selected scholars from various countries. Several photographs of Michotte in his laboratory, as well as group pictures from various international psychological congresses, are reproduced. Abstracts of all original contributions in this volume will be found elsewhere in this issue.—M. L. Reymerit.

4009. Weber, C. O. (Wells Coll., Aurora, N. Y.) Ivy Gertrude Campbell Fisher: 1888-1948. *Amer. J. Psychol.*, 1948, 61, 585-586.—Obituary.

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

4010. Baumgartner-Tramer, F. *La psychologie expérimentale et la psychiatrie*. (Experimental psychology and psychiatry.) In *Miscellanea psychologica* Albert Michotte, (see 23: 4008), 529-543.—The history of the growing liaison between psychology and psychiatry is traced from its beginnings in the 19th century. Some differences in emphasis are mentioned. Especial attention is given to the development of the psychogenic theory of neuroses through Charcot, Janet, and particularly Freud. Psychopathology and experimental psychology have much to give each other and their association should prove fruitful.—R. J. Ellingson.

4011. Cowan, John Benjamin. *The Doctor of Education and the Doctor of Philosophy in education at Stanford University, 1928-1947*. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 231-237. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4012. Davidson, Henry A. (V. A. Regional Off., Newark, N. J.) *The psychiatric manpower of New Jersey*. *Amer. J. Psychiat.*, 1948, 105, 292-297.—Planning for new psychiatric clinics is impossible without accurate data as to the available psychi-

atrists in the community. Since there is "no way of defining psychiatrist" this becomes a complex task. The author offers a system of classification, in which the psychiatrist falls into one of 4 groups. Through this method, the psychiatrists of New Jersey were classified. It was found that "New Jersey was well supplied with psychiatrists" when compared to other states. "Private psychiatrists are available at a ratio of 29,000 persons per practitioner" which is average, but not ideal.—R. D. Weitz.

4013. Hunter, W. S. *Some observations on the status of psychology*. In *Miscellanea psychologica* Albert Michotte, (see 23: 4008), 39-48.—With the idea in mind that psychology will not be represented at the council table where all scientists gather by sheer weight of scientific contributions, irrespective of the application of this knowledge, the writer traces certain aspects of the growth of the social recognition of psychology in America. He outlines the developments and influence of psychology in The National Academy of Sciences, The National Research Council, and The National Defense Research Committee. In considering the future of psychology, the author suggests that it will approximate the pattern of medicine and engineering in that by far the greater number of psychologists will be engaged in practical work outside the universities and research institutes.—F. E. Crouse.

4014. Salter, Mary D. (U. Toronto, Ont., Can.) *The role of the clinical psychologist in Canada*. *Canad. J. Psychol.*, 1949, 3, 6-18.—There is little room in Canada at the present time for clinical psychology as a therapeutic discipline. Further, training methods for clinical psychologists are inadequate. Suggestions are offered both for improving the status of the psychologist as a clinician and for improving the training of clinical psychologists.—J. W. Bowles, Jr.

4015. U. S. Dept. of Labor, Bureau of Labor Statistics. *Employment outlook for psychologists*. *Bur. Labor Statist., Occup. Outlook Summary* (March 30, 1949.), 5 p.—This release summarizes the conclusions of the Occupational Outlook Service from a study of employment possibilities for psychologists as of March 30, 1949. The work of psychologists is described. The current employment status, earnings and required training, and other qualifications are summarized. The future outlook for employment possibilities in various psychological specialties is delineated.—C. M. Louttit.

PHYSIOLOGICAL PSYCHOLOGY

4016. Grande Covián, F. *La selección de alimento como problema psico-fisiológico*. (The selection of food as a psycho-physiological problem.) *Rev. Psicol. gen. aplic.*, Madrid, 1948, 3, 267-306.—Some of the literature on the relation between the selection of food and physiological needs is reviewed with special attention to the work of Widmark, Scott and Quint, and Richter and his collaborators. Previous studies are criticized on the grounds that

insufficient attention has been paid to individual differences, to the specific effects of the experimental conditions, and to the possible operation of non-nutritive needs. Experimental studies are quoted to demonstrate the importance of these non-nutritive factors. Possible physiological mechanisms underlying the selection of food (gustatory sensitivity and the normal functioning of certain hypothalamic structures) are described. 79-item bibliography.—A. J. Smith.

4017. Kuntz, Albert, & Richins, Calvin A. (St. Louis U., Sch. Med., Mo.) Effects of direct and reflex nerve stimulation on the exocrine secretory activity of pancreas. *J. Neurophysiol.*, 1949, 12, 29-35.—25 dogs were used in this study of the role of parasympathetic and sympathetic nerve supply in the exocrine secretory activity of the pancreas. The rate of secretion is increased by faradic stimulation of the vagi or splanchnic nerves. Nerve section and drug experiments show that the post-ganglionic nerve supply to the pancreas contains both cholinergic and adrenergic components. Mesenteric nerve stimulation decreases pancreatic secretion; there are available here reflex pathways which do not transverse the central nervous system. It is probable that alteration in the blood flow is important.—C. E. Henry.

4018. Nyssen, René. Etude expérimentale de la signification psycho-physiologique des réactions pléthysmographiques. (Experimental study of the psycho-physiological significance of plethysmographic reactions.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 268-283.—It has been demonstrated in this study that (1) involuntary muscular contractions and changes in tonus in the hand and forearm nearly always accompany the psychic stimuli usually used in plethysmographic studies, (2) such movements can affect the plethysmographic record, even to the point of simulating pulse records, and (3) that the two most common recording techniques, those of Mosso and Wiersma, produce different records. These findings indicate that plethysmography, as it has been applied until the present in psycho-physiology, does not merit our confidence. A technique must be devised which will permit the identification of changes in the records not due to true volumetric changes.—R. J. Ellingson.

[See also abstract 4000.]

NERVOUS SYSTEM

4019. Ajmone Marsan, Cosimo, & Fuortes, Michelangelo G. F. (Clinica delle Malattie nervose e mentali di Torino, Italy.) Elettroencefalografia: scopi, possibilità e metodi. (Electroencephalography: aims, possibility and methods.) *Arch. Psicol. Neurol. Psichiat.*, 1948, 9, 260-287.—Requirements of an electroencephalograph in connection with physiological and clinical work are indicated and types of apparatus which most adequately satisfy such requirements are described as to electrodes,

amplification, registering apparatus, accessories and general installation. 101 references.—F. C. Sumner.

4020. Anderson, C. L. Experimental production of convulsive seizures. *J. nerv. ment. Dis.*, 1949, 109, 210-219.—Eight anesthetized adult rabbits were administered intracranial injections of 3 cc. of acetone and saline in equal parts on alternate days. Each injection produced immediate convulsive effects. Analysis by the ether extraction method showed a statistically significant difference in fat content of brains of experimental vs. control rabbits but not in residue weight. The tentative conclusion is drawn that the convulsions were due to the reduced lipin and lipid content of the brain in line with the hypothesis that convulsions are normally related to a deficiency of brain cholesterol.—N. H. Pronko.

4021. Eccles, J. C., & MacFarlane, W. V. (U. Otago, Dunedin, N. Z.) Actions of anti-cholinesterases on endplate potential of frog muscle. *J. Neurophysiol.*, 1949, 12, 59-80.—This reports a systematic study of the effect of prostigmine and 6 other anti-cholinesterases on the endplate potential (e.p.p.) of curarized frog sartorius muscle. 4 criteria involving the time course of the e.p.p. and the size of the slow decay component were used. All 7 anti-cholinesterases slowed the time course of the e.p.p. set up by single or repetitive nerve volleys and all increase the voltage of the slow component. As judged by any single criterion there are wide divergences in the effectiveness of these substances. These findings are fully in accord with the ACh hypothesis of neuro-muscular transmission.—C. E. Henry.

4022. Gyrfas, K., Pollock, G. H., & Stein, S. N. (U. Ill. Neuropsychiat. Inst., Chicago.) Central inhibitory effects of carbon dioxide. IV. Convulsive phenomena. *Proc. Soc. exp. Biol., N. Y.*, 1949, 70, 292-293.—To establish the anticonvulsant effects of carbon dioxide in man 92 experiments were conducted on 18 adult subjects by first determining for each the electro-shock dosage and then by administering sufficient carbon dioxide for time sufficient to prevent convulsive current action. The concentration was found to vary from 15 to 30% and the duration of inhalation from 25 to 170 seconds. The convulsive effects of carbon dioxide on human behavior are also briefly characterized.—L. A. Pennington.

4023. Hampson, John L. (Johns Hopkins U., Baltimore, Md.) Relationships between cat cerebral and cerebellar cortices. *J. Neurophysiol.*, 1949, 12, 37-50.—Using cats under sodium pentobarbital, the cortex was stimulated in experiments designed to pick up and record the cerebellar response. The data indicate that certain functional areas of the cortex project to related regions of the contralateral cerebellar cortex as follows: Somatic area 1 to the anterior lobe and lobulus simplex. Somatic area 2 to the paramedian lobule. Auditory areas 1 and 2 to the folium vermis and tuber vermis. There is also a fairly consistent areal subdivision between

cortical and cerebellar representation. The cortical autonomic center for the eyes (medial wall) projects contralaterally to Crus 1 and 2. There is a cerebellar as well as a cortical duality of representation. Illustrations are given of the form of these surface positive evoked potentials as well as data on latencies.—C. E. Henry.

4024. Holt, William L., Jr., & Rinkel, Max; Greenblatt, Milton, & Anderson, Richard. My-
anesin effects in rabbits undergoing electric shock. *J. nerv. ment. Dis.*, 1949, 109, 271-272.—Abstract.

4025. Hyde, J., Beckett, S., & Gellhorn, E. (U. Minnesota, Minneapolis.) Acetylcholine and convulsive activity. *J. Neurophysiol.*, 1949, 12, 17-27.—"Eserine administered intravenously or applied directly to the exposed cortex was found to facilitate the convulsive response to a series of widely different chemical substances. This facilitation was characterized by a more rapid onset of convulsive activity, more frequent convulsive spikes, the elicitation of spikes by the combined application of eserine and the convulsant substance when the latter was ineffective by itself, and the re-evocation of convulsive activity on application of eserine to a previously spiking area which had apparently recovered from the effect of the convulsant substance. Intravenously injected prostigmine, like eserine, exerted a facilitating effect on convulsive activity in doses which were without significant effect on blood pressure or heart rate. The parasympathomimetic choline ester mecholyl applied to the cortex in conjunction with convulsant substances augmented their effect in a way similar to that described above for eserine. These results are interpreted as indicating a significant role of acetylcholine in the processes underlying cortical convulsive activity. Di-isopropyl fluorophosphate was without effect on convulsive activity whether administered intravenously or applied directly to the cortex."—C. E. Henry.

4026. Jones, F. Nowell. (State Coll. Washington, Pullman.) Some psychological implications of cortical suppressor areas. *Psychol. Rev.*, 1949, 56, 95-97.—Stimulation of certain areas of the cerebral cortex has been shown to result in reduced excitability of the motor cortex. Further, nociceptive stimulation leads to arousal of suppressor areas, and this in turn to suppression of the sensory cortex. From this point of view, "practice in relaxation may be considered to result in learning to 'suppress'." Experiments based on shock are complicated by "suppression."—R. B. Ammons.

4027. Nicol, J. A. Colin. (U. British Columbia, Vancouver.) The giant axons of annelids. *Quart. Rev. Biol.*, 1948, 23, 291-323.—This review describes the giant nerve fibers which are found in annelids—their structure and distribution, their size (diameters varying up to at least 1 mm.), their speed of conduction (from 2 to 45 meters per second). Their diversity of structure and arrangement suggests that they developed independently in different families. They usually provide multiple sensory

and/or efferent connections, and conduct impulses in either direction throughout their length.—W. E. Kappauf.

4028. Parry, D. A. (U. Cambridge, Eng.) The function of the insect ocellus. *J. exp. Biol.*, 1947, 24, 214-219.—The structure and optical system of the ocellus are described and its occurrence in insects is summarized. Previous behavioral data on the function of the ocellus are supplemented in this paper by a report of experiments involving the recording of electrical activity in the ocellar nerve and in the circum-oesophageal commissures of the migratory locust. The response in the ocellar nerve is one of polarization, the ocellar end of the nerve becoming positive in relation to more central portions of the nerve when the ocellus is illuminated. Darkening the ocellus produces depolarization, and in the commissure a burst of impulses. The ocellus is therefore thought to regulate the polarization of a ganglion within the brain, the state of which in turn controls the commissural discharge. The data are interpreted as supporting Wolsky's theory that the ocellus affects the general excitatory state of the nervous system.—W. E. Kappauf.

4029. Pollock, G. H., Stein, S. N., & Gyafas, K. (U. Ill., Neuropsychiat. Inst., Chicago.) Central inhibitory effects of carbon dioxide. III. Man. *Proc. Soc. exp. Biol., N. Y.*, 1949, 70, 291-292.—The effect of carbon dioxide inhalations upon super-threshold electrical induction of cortical seizures is tested on 18 adults of varying ages, 14 of whom were neurotic and 4 psychotic. Electroencephalographic records were made at experimental and control-test intervals. Results show that 15 to 30% concentrations of carbon dioxide routinely prevent seizures, and at 30% only 30 seconds inhalation time is required. These and other findings are discussed briefly in relation to the central depressant effects of carbon dioxide.—L. A. Pennington.

4030. Sherman, Irving C., Tigay, Eli L., Arief, Alex J., & Schiller, Maurice, A. (Northwestern U., Med. Sch., Chicago, Ill.) Return of sensation after experimentally produced lesions in sciatic nerve of cat. *J. Neurophysiol.*, 1949, 12, 1-15.—The area of analgesia to pin-prick is described for various degrees of injury and regeneration. After nerve section there is a progressive shrinkage of the analgesic area due to ingrowth of pain fibers from adjacent nerves; the remaining analgesic region is termed the area of isolated supply. When regeneration is allowed by primary or secondary suture large areas may become imperfectly sensitive. Rate of recovery is slower following delayed suture than after primary suture; 50% of the animals showed complete recovery at 180 days with the latter. There is no correlation between sensory and motor recovery; motor recovery may greatly precede at times. Recovery of placing reaction precedes cutaneous and deep sensibility. A classification of terminology is suggested. These data do not support the Rivers and Head concept of protopathic and epicritic sensibilities.—C. E. Henry.

4031. Sperry, R. W. Orderly patterning of synaptic associations in regeneration of intracranial fibre tracts mediating visuomotor co-ordination. *Anat. Rec.*, 1948, 102, 63-75.—All the descending intracranial fibre tracts which link the primary visual centres of the adult water newt, *Triturus viridescens*, with the medulla and cord were severed, by transecting the brain posterior to the optic lobes, in order to find out if the divided fibres would regenerate and restore functional associations with the lower centres of the spinal cord and medulla, and, if so, whether the central synaptic associations would be restored in a haphazard or in an orderly manner. In general, after regeneration, the lost optico-kinetic functions were restored in an orderly systematic manner; that this was not due to, or helped by a learning process was shown in animals whose eyes had been rotated surgically through 180°; on regeneration of their tracts, the optico-kinetic responses were inverted. The results are considered to be at variance with the theory of neurobiotaxis and accord more with the author's theory which assumes that neuronal linkages occur as a result of selective chemical affinities.—(Courtesy of *Ophthalmol. Lit.*)

4032. Stein, S. N., & Pollock, G. H. (U. Ill., Neuropsychiat. Inst., Chicago.) Central inhibitory effects of carbon dioxide. II. *Macacus rhesus*. *Proc. Soc. exp. Biol.*, N. Y., 1949, 70, 290-291.—Immobilized *Macacus rhesus* monkeys, fitted with bilateral screw-in electrodes, were artificially ventilated with controlled concentrations of carbon dioxide for various time intervals, and were immediately thereafter stimulated with threshold or super-threshold voltages. Data indicate that these animals ventilated for 3 minutes with 20% or more carbon dioxide concentrations were not subject to seizures. It is concluded that carbon dioxide prevents in monkeys the induction of cortical seizures as the drug does in cats.—L. A. Pennington.

4033. Van der Horst, L. Electroencephalography and its significance in biopsychology and clinical diagnostics. *Psychiat. neurol. Bl.*, Amst., 1947, No. 1/2, 3-28.—This article presents a review of various exploratory investigations conducted in what is apparently one of the first psychobiology laboratories in The Netherlands equipped with electroencephalographic equipment.—R. J. Ellingson.

4034. Walter, V. J., & Walter, W. Grey. (Burden Neurological Institute, Bristol, Eng.) The central effects of rhythmic sensory stimulation. *EEG clin. Neurophysiol.*, 1949, 1, 57-86.—This reports an attempt to extend the type and range of stimuli that affect the brain using the EEG and special electronic analyzers as well as subjective reports to study such effects. Rhythmic visual flash stimuli, in addition to evoking local discrete responses and driving, may also affect distant areas in direct and harmonic fashion. Such stimulation may induce somatic, mental, and (often unpleasant) emotional changes; these responses in turn may be altered by psychophysiological changes in these dimensions. Per-

sonality, age and anatomical variations, and disease appear to interact with and upon these effects. It is suggested that anomalous reactions are related to spontaneous and evoked activity in both cortical and thalamic regions; theoretical implications are discussed and tentative explanations are suggested.—C. E. Henry.

4035. Weiss, Paul, & Hiscoe, Helen B. (U. Chicago, Ill.) Experiments on the mechanism of nerve growth. *J. exp. Zool.*, 1948, 107, 315-395.—Experiments with constricted nerves, mostly with rats, show that nerves which have regenerated through a constricted zone display a permanent deficit of width distally to the constriction and a permanent surplus of axoplasm (a "damming") immediately proximally to the constriction. Removal of the constricting agent is followed by a downward movement of the surplus axoplasm at a rate of about 1 mm. per day. These results are taken to signify that growth, in the sense of the production of new protoplasm, occurs solely at the base of the fiber in the nucleated part of the cell body, and that the column of axoplasm is maintained in continuous proximo-distal motion. It is further suggested that it may be true of all cells that the reproduction of cytoplasm is confined to the territory of the nucleus.—W. E. Kappauf.

[See also abstracts 3978, 3979, 3893, 3986, 4379, 4380, 4381, 4385.]

RECEPTIVE AND PERCEPTUAL PROCESSES

4036. Bakay, Eva (Pazmany U., Budapest, Hungary.), & Schiller, Paul H. Manipulative correction of visually presented figures. *Amer. J. Psychol.*, 1948, 61, 487-501.—In 4 series of experiments, 262 adults Ss of both sexes made 16,384 overt motor rearrangements of movable patterns. With the 2-part patterns there was a "clear-cut dominance of closed, balanced and symmetrical arrangements above all other possibilities." In the case of single figures, re-arrangement in the vertical direction seems to overweigh the horizontal in importance, the latter being chosen generally when in such a position symmetry along the vertical axis is secured too. "Thus it appears that the dominantly manifested positions are those that coincide in a kinetic field with the positions of the actually best balance." This interpretation is preferred to one emphasizing visual factors.—S. C. Ericksen.

4037. Bishop, George H. (Washington U., St. Louis, Mo.) Relation of pain sensory threshold to form of mechanical stimulator. *J. Neurophysiol.*, 1949, 12, 51-57.—Spherical stimulators (very small balls of solder) are useful because their curvature gives a simple measure of indentation; threshold is reached when approximately half the sphere is in contact, and the epithelium is not penetrated. The data indicate that grams force per area of hemisphere, or per radius squared, give nearly constant

threshold values over a considerable range of sizes. The constant factor of stimulation at threshold appears to be lateral stretch of the subepitheat nerve net; similarly, pain results from lengthwise stretch of nerve terminals. Other experiences are consistent with the inference that (barring inflammation) stretch is an effective stimulus for pain endings in the skin. —C. E. Henry.

4038. Fauville, A. Vision périphérique et réaction motrice. (Peripheral vision and motor reaction.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 323-340.—In this study, completed in 1921 but published only now, the author attempted to determine the extent to which errors in a visuo-motor reaction can be separated into visual and motor components. Using 2 to 5 subjects in the different parts of the experiment, the author had them variously estimate the bisection point in the angular separation of 2 points on a perimeter, using monocular and binocular vision; binocular vision gave the smaller errors. Then fixating again a central point on the perimeter, the subject had to estimate the position of a peripheral point in the visual field by pointing to its position with their extended arms. The errors for both hands tended to increase with increased distance toward the periphery. Duplication of a particular angle on the basis of kinaesthetic cues alone produced errors which tended to be minimal for those angles for which the arm was in a position perpendicular to the transverse axis of the body. Using the Müller-Lyer illusion he found errors to be minimal when the task permitted use of both visual and motor cues. Individual differences between subjects were pronounced.—R. K. Meister.

4039. Fraisse, Paul. De l'assimilation et de la distinction comme processus fondamentaux de la connaissance. (On assimilation and distinction as fundamental processes of consciousness.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 181-195.—Using 4 successive light flashes to define the 3 time intervals between flashes and giving the subject the task of reproducing these intervals by pressing a key which recorded on a chronograph, the author interprets his results as demonstrating a central mechanism for the perception of rhythm which can accept data from one modality and translate it to another. This perception is effected first by assimilation in which the similar elements are given functional equivalence and, second, by distinction in which the dissimilar elements are so identified by comparison with the standard established by assimilation. Thus the processes of assimilation and distinction appear as analogues, i.e., as having the same total function. They tend to create simple structures (assimilation) without the possibility of confusion (distinction). Bibliography. —R. K. Meister.

4040. Gershuni, G. V. Non-sensory reactions during activity of sensory receptors. *J. Physiol., U. S. S. R.*, 1947, 33, 393-412.—The use of the psycho-galvanic and the cochlea-pupillary reflexes

and the electro-encephalogram is described for studying the relation between the sensory threshold and the threshold for non-sensory reactions after afferent stimulations. A review of the literature is given together with some experiments by the author. —(Courtesy of *Ophthalm. Lit.*)

4041. Koehler, W., & Dinnerstein, D. Figural after-effects in kinesthesia. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 196-220.—An investigation using the method of minimal changes was made to determine the nature of kinesthetic after-effects with the longer range purpose of discovering to what degree kinesthetic and visual after-effects are phenomena of the same kind. Ways in which kinesthetic space perception differed from visual depth perception were thought possibly to be due to additional factors of an intensive nature arising from tensions in muscles. Otherwise, it can be said with reference to both areas of perception that their nature is still a neurological secret.—R. Hoffberg.

4042. Livingston, W. K. (*U. Oregon Med. Sch., Portland.*) The vicious cycle in causalgia. *Ann. N. Y. Acad. Sci.*, 1948, 50, 247-258.—The writer describes the origin of the term "causalgia," from its use by S. Weir Mitchell. A case report and treatment are presented, together with a discussion of phantom limb pain. An hypothesis is formulated and the experimental evidence discussed.—S. Ross.

4043. McClelland, David C., Atkinson, John W., & Clark, Russell A. (*Wesleyan U., Middletown, Conn.*) The projective expression of needs: III. The effect of ego-involvement, success, and failure on perception. *J. Psychol.*, 1949, 27, 311-330.—"247 male college students made perceptual 'inferences' on the basis of verbal cues and supposedly faint (actually absent) visual stimuli under four major conditions designed to create in the S's different intensities of the need for achievement." The conditions were: neutral non-ego-involving instructions, announced norms producing failure in all S's, announced norms permitting success for all S's, instructions producing ego-involvement but with no announced norms. Making perceptual inferences under these conditions proved so difficult and frustrating that to some extent all the ego-involved conditions proved to be failure conditions. These results resembled those previously found with hunger. —R. W. Husband.

4044. Musatti, Cesare L. (*U. Milan, Italy.*) Intorno al meccanismo dell'allucinazione. (Concerning the mechanism of hallucination.) *Arch. Psicol. Neurol. Psichiat.*, 1947, 8, 238-262.—Differentiation between sense-perception and hallucination is no easy matter. Eidetic imagery, Gestalten, and perceptual totalization make differentiation still more difficult between perception and hallucination. Freud's criterion of sense-perception namely, that sense-perception is accompanied by a motor examination of reality, is criticized as not thoroughly discriminative. From an examination of negative (Bernheim), oneiric, hypnotic, psychotic and toxic

hallucination the author believes the intrinsic differences between sense-perception and hallucination are: (1) sense-perception is of peripheral origin while hallucination is of endogenous origin; (2) sense-perception has always the character of "presence" while hallucination has the character of "absence" or of only "mentally present"; (3) hallucination involves a withdrawal from reality of that affective energy which is normally expended in sense-perception or, as Freud would say, in examination of reality.—*F. C. Sumner.*

4045. Rey, André. Observations sur la douleur cutanée étudiée par la méthode stroboscopique. (Observations on cutaneous pain studied by the stroboscopic method.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 254-267.—A technique is presented for studying apparent movement in the area of the tactile (cutaneous) sense modality. Excitations were produced electrically by means of fine steel electrodes introduced into the dermis. Optimum stimulus values proved to be .1 sec. duration, .4 V, and .2 mA. Apparent movement was produced by stimulating first one point and then a second. Important variables were the temporal interval separating the two stimuli (optimum interval ca. 1 sec.) and the spatial interval (the two-point limen must clearly be exceeded), which variables are interrelated. Stroboscopic effects were not always obtained. Most often the pain seemed to pass under the skin from the first to the second point. Occasionally "jumping" and qualitative changes in the sensations were observed. Apparent movement occurred more readily across the anterior face of the body than across the posterior. Both referred and extended pain phenomena were observed and discussed.—*R. J. Ellingson.*

4046. Zagorulko, L. T. Mechanism of interactions between various afferent systems. *J. Physiol., U. S. S. R.*, 1947, 33, 433-447.—The effect of auditory stimulation on the Hering after-images and Purkinje images was studied in 6 subjects. During the auditory stimulus there is usually a shortening of the latent period of a visual after-image accompanied by an increase in its size and brightness. During the auditory after-image the effects of a visual after-image are more marked. Auditory stimulation of about 20 decibels increased the duration of the Purkinje image. The effect was increased by caffeine and still more by strychnine.—(Courtesy of *Ophthal. Lit.*)

4047. Zwerling, Israel. A note on Wendt's views of the importance of psychological factors in motion sickness. *J. Aviat. Med.*, 1949, 20, 68-71.—The author criticizes Wendt's article (see 22: 3369) which attempts to show that psychological factors are of minor importance in the production of motion sickness.—*A. Chapanis.*

[See also abstracts 3987, 4030, 4034, 4395.]

VISION

4048. Baker, Howard DeHaven. (Columbia U., New York.) The course of foveal light adaptation

measured by the threshold intensity increment. *J. opt. Soc. Amer.*, 1949, 39, 172-179.—"The course of change of sensitivity during illumination of the fovea has been determined for various intensities of adapting light." Sensitivity, defined as the reciprocal of the just perceptible increment in intensity, "... is low immediately after the onset of the adapting light; it increases to a maximum several minutes after the onset of the adapting illumination and then declines to an intermediate final level." This finding agrees with data reported by Riggs and Graham on light adaptation in *Limulus* (see 15: 2522). Theoretical implications of the initial rise in sensitivity are discussed.—*L. A. Riggs.*

4049. Baumgardt, E. Sur les mécanismes de l'excitation visuelle. I. La théorie photochimique et la nature quantique et statistique de l'excitation liminaire. (The mechanisms of visual excitation. I. The photochemical theory and the quantic and statistical nature of threshold excitation.) *Arch. Sci. Physiol.*, 1947, 1, 257-274.—The calculations described in this paper are based on the quantic nature of the light stimulus and the consequently statistical nature of the visual response. The single assumption is made that excitation of a retinal ganglion cell occurs when two quanta are absorbed by two rods, or by a single cone, in the region with which this ganglion cell makes connections, provided that the interval of time separating the absorption of the two quanta does not exceed a value T , defined as the largest value of the stimulus-duration for which the relationship: Intensity \times time = constant is valid. With this assumption only, and with T as the sole parameter, Ricco's, Piper's, and Piéron's Laws may be derived theoretically; moreover the relationship between the brightness and duration of the threshold stimulus may be likewise calculated and may be shown to fit the experimental data fairly well.—(Courtesy of *Ophthal. Lit.*)

4050. Bell, G. H., & Weir, J. B. de V. Vision during glancing movements of the eyes. *Trans. ophthal. Soc. U. K.*, 1947, 67, 221-228.—The discussion centered on the explanation of the fact that when the gaze shifts rapidly from one point to another, not even a blurred visual impression is received of the view between the two points—as happens in the glancing movements of a ciné camera. With the aid of certain experiments the conclusion was reached that the damping down of the intervening images does not take place at a retinal level but in the cortex and is possibly initiated by impulses arising in the external ocular muscles or at some higher motor level.—(Courtesy of *Ophthal. Lit.*)

4051. Berger, A., & Monjé, M. Über den Einfluss der Aniseikonie auf das Tiefensehen. (The effect of aniseikonia on depth perception.) *v. Graefes Arch. Ophthal.*, 1948, 148, 515-528.—Investigations with the Monjé stereo-eidometer indicate that a difference in size of retinal images up to 17% slightly diminishes, but by no means destroys, depth acuity. After 1 hour of wearing a size lens producing a 3.2%

aniseikonia, complete adaptation was attained so that normal space perception was achieved.—(Courtesy of *Ophthalm. Lit.*)

4052. Berliner, Anna. (3955 Clarendon Ave., Chicago, Ill.) Visual psychology. *Optom. Wkly.* 1948, 39, 159-163; 203-205, 209; 243-246; 351-353; 401-404; 813-816; 851-852; 1017-1021; 1049-1051; 1983-1984.—These articles conclude a series in which a detailed discussion of visual space perception, stereopsis and other aspects of binocular vision was presented.—D. Shaad.

4053. Boice, Mary L., Tinker, Miles A., & Pater-son, Donald G. (U. Minnesota, Minneapolis.) Color vision and age. *Amer. J. Psychol.*, 1948, 61, 520-526.—Using a combination of the Ishihara Test and the American Optical Co. Test, 236 faculty men were tested. As a group, 7.5% were color-blind. There was no evidence of deterioration in color efficiency from age 20-59. One-fourth of a small sample of 21 faculty men aged 60 and over were color-blind. An additional sample of 19 men 60 and over also yielded abnormally high color-blind rate, namely 15.8%. The over-all results are in conflict with the earlier work reported by Tiffin.—S. C. Ericksen.

4054. Bonavolonta, G. Il comportamento del senso luminoso nel corso dell' ipoglicemia sperimentale. (The light sense in experimental hypoglycaemia.) *G. ital. Ophthalm.*, 1948, 1, 505-519.—The author studied, in 9 subjects, the light sense during hypoglycaemia provoked by insulin administration, and found that in 7 of them dark-adaptation was decreased. He considered that this fact might be referred to a transient alteration of retinal glycolysis.—(Courtesy of *Ophthalm. Lit.*)

4055. Braun-Vallon. Les hétérophories. (Heterophoria.) *Bull. Soc. Ophthalm. Paris*, 1948, 6, 332-400.—This paper deals with the various positions of rest of the eyes, and the voluntary and reflex factors which maintain them are studied. Heterophoria seldom has an anatomical cause; it is usually of innervational origin. The clinical examination of a patient for heterophoria is based on the suppression of fusion by various tests, the most useful of which is the Maddox rod and the screen test. Prisms are used for the measurement of the deviation for distant and near vision. The various types of heterophoria are discussed and described. The aim of the treatment is to restore normal convergence or divergence so as to maintain fusion without effort. The treatment consists in: correction of the refraction when necessary (the muscle balance being taken care of), orthoptic training amplified by home exercises, prescription of prisms when orthoptic treatment cannot be undertaken or has failed, and in a few cases, surgical correction. Care must be taken to improve the general and mental condition. The social importance of heterophoria must not be neglected, especially with workers requiring perfect binocular vision and when atmospheric influences (high altitude, etc.) may modify the muscle balance.—(Courtesy of *Ophthalm. Lit.*)

4056. Bucalossi, A. Sulla accomodazione cromatica. (Chromatic accommodation.) *Atti 36 Congr. Soc. Ophthalm. Ital.*, 1947, 36, 98-103.—To attain maximum visual acuity it is necessary to modify artificially the refraction of the eye depending on the wave-length of light. The process normally occurs automatically. 12 references.—(Courtesy of *Ophthalm. Lit.*)

4057. Christian, P., & Umbach, W. Sehschärfe, Beleuchtungshelligkeit und Riccoscher Satz bei Sehhirnverletzten. (Visual acuity and brightness illumination and Ricco's hypothesis in patients with cerebral lesions affecting the visual areas.) *Dtsch. Z. Nervenheilk.*, 1947, 158, 1-15.—Ricco put forward the view that the increase in the size of an illuminated area determined the increase in the subjective sensation of brightness. On examination of 15 patients with cranial lesions in the region of the visual centres, the authors showed that to attain maximal visual acuity, a higher degree of illumination is necessary, sometimes varying from 100-1,000 times the normal. A similar decline in visual acuity was noted in low degrees of illumination and, in general, the curves of visual acuity did not run evenly but showed abrupt changes. Ricco's proposition was not maintained in such cases.—(Courtesy of *Ophthalm. Lit.*)

4058. Cibus, P., & Müller, H. Lokaladaptometrische Untersuchungen am Projektions-perimeter nach Maggiore. (Local-adaptometric investigations with the Maggiore Projection-Perimeter.) *v. Graefes Arch. Ophthalm.*, 1948, 148, 468-489.—With weak colourless stimuli it is found that identical local adaptation times may be obtained with any retinal point within 10-15° of the central fovea. As the intensity of the stimulus is increased it is found that the times vary with the different meridians employed.—(Courtesy of *Ophthalm. Lit.*)

4059. Colenbrander, M. C. De grenzen van het stereoscopisch zien. (The limits of stereoscopic vision.) *Ned. Tijdschr. Geneesk.*, 1948, 1, 809-812.—The author investigating stereoscopic vision by the method of fitting up a central moveable rod between 2 fixed rods at a distance of 5 metres, all 3 rods being seen through a slit, found that the minimum displacement which could be recognized was 1 cm. if the rods were placed 4 cm. apart. By blurring vision with plus lenses, stereoscopic acuity diminishes proportionately with visual acuity. With blurring of one eye only, stereoscopic acuity diminished proportionately to the square root of the visual acuity of this eye.—(Courtesy of *Ophthalm. Lit.*)

4060. Dalla Volta, Amedeo. (U. Genoa, Italy.) Contributi allo studio della percezione con particolare riferimento alla psicologia differenziale. II. Forma e significato nel processo di inversione del rapporto di figura e sfondo. (Contributions to the study of perception with particular reference to differential psychology. II. Form and meaning in the process of inverting the relation of figure and ground.) *Arch. Psicol. Neurol. Psichiat.*, 1948, 9, 307-328, 403-442.—A study is made of the effect of

slight changes in figure-ground relations upon the perceptual inversion of simple ambiguous figures and upon the apparent tridimensionality of figures without perspective and without chiaroscuro. Inversion of ambiguous figures is seen as a slow and biphasic process and meaning has a directive function in the process of inversion. The latter part of the study is devoted to the effect of various types of frames and of water-level on the perception of pictures.—F. C. Sumner.

4061. Eiselt, E., & Kloubek, A. Poruchy barveného a perspektivního vidění po streptomycinu. (Disturbances of colour vision and perspective due to streptomycin.) *Čas. Lek. Čes.*, 1948, 87, 549-551.—The authors describe unusual toxic symptoms after administration of 2 grams of streptomycin to a patient suffering from a *Bacterium coli* infection of the upper intestinal tract. The patient received by injection 1 gram of streptomycin divided into 8 doses in 24 hours, and in addition 1 gram of streptomycin by a duodenal tube. Soon after the treatment started, the patient became unusually euphoric and complained of disturbances of colour vision and perspective, but these symptoms disappeared after the dose had been reduced to 1 gram daily. The authors diagnosed this case as a mild allergic encephalitis.—(Courtesy of *Ophthal. Lit.*)

4062. Feinberg, Richard. (Pacific U., Forest Grove, Ore.) A study of some aspects of peripheral visual acuity. *Amer. J. Optom.*, 1949, 26, 49-56; 105-119.—Acuity at 20 feet was determined at the point of regard and 1°, 2°, 3°, 4°, and 5° from it in 8 meridians with Landolt rings of graded sizes presented in 4 positions with tachistoscopic exposures of 0.18 sec. Fixation and adaptation were controlled by alternate illumination of 2 tangent screens viewed through a half-silvered mirror set obliquely so that the fixation points on the 2 screens appeared to coincide. 5 of 8 subjects had sufficiently good peripheral acuity to permit measurement at 5°. The curve of decrease in acuity followed closely the curve representing the square root of cone population per square millimeter although individual variations were considerable. Differences for the 8 meridians were not significant.—M. R. Stoll.

4063. Fry, Glenn A., Bridgman, C. S., & Ellersbrock, V. J. (Ohio State U., Columbus.) The effects of atmospheric scattering on binocular depth perception. *Amer. J. Optom.*, 1949, 26, 9-15.—Usually monocular clues are ruled out in studies of depth perception. This paper presents an investigation of the effect of contrast reduction, compared to that effected by atmospheric haze, on apparent target distance in a situation comparable to that presented by the stereoscopic range finder. An apparatus was designed to provide controlled veiling glare with constant background brightness on a dark rectangular target. A mechanically moved aperture was required to be brought to points at which it was just perceptibly nearer or more distant than the fixed target. Averaged results for 24 subjects at

contrast levels of 100%, 50%, 25% and 15% show an appreciable increase in apparent distance of the target with decrease in contrast. Other experiments have indicated that this effect persists in spite of training, indicating that it may have a fundamental physiological basis.—M. R. Stoll.

4064. Galifret, Yves, & Piéron, Henri. (Coll. France, Paris.) Les spécificités de persistance des impressions chromatiques fondamentales. (The specificity of persistence in fundamental chromatic responses.) *Rev. Opt. (théor. instrum.)*, 1949, 28, 154-156.—Critical flicker fusion frequency was determined to vary as a function of monochromatic radiation. Two areas, one white, the other spectral monochromatic, were equated for brightness and alternated, giving a purely chromatic flicker. At a brightness level of 0.1 "nit" (candles per square meter) the mean duration of the flicker cycle for 2 observers was 103, 110, and 122 milliseconds respectively for blue (475 mμ), green (530 mμ), and red (640 mμ). The conclusions were made that persistence of chromatic sensations is a function of chromatic quality, blue persisting longer than green or red, and that persistence is an inverse logarithmic function of brightness. The observed differences were said to be due to differences in the sensitivity of the components of a trireceptor system.—R. W. Burnham.

4065. Günther, G. Ein Gerät zur objektiven Prüfung der zentralen Sehschärfe. (Apparatus for the objective determination of central visual acuity.) *v. Graefes Arch. Ophthal.*, 1948, 148, 430-442.—Optico-kinetic nystagmus is induced by rotating a chessboard field in front of the eye; the angular size of the squares can be varied from 1.5 to 60 minutes of arc. The smallest size of square that produces a nystagmus indicates the visual acuity.—(Courtesy of *Ophthal. Lit.*)

4066. Horowitz, Milton William. An analysis of the superiority of binocular over monocular visual acuity. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 187-189. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1947.

4067. Hume, E. M., & Krebs, H. A. [Comp.] Vitamin A requirement of human adults. London: His Majesty's Stationery Office, 1949. 145 p. (Available from British Information Service, New York.)—In addition to the introductory material the report consists of 3 parts: (1) concise account of the experiment, (2) elaboration of special aspects (e.g., comparison of Wald's and Craik's dark adaptometers), and (3) details of the evidence. 23 conscientious objectors (20 men and 3 women), 19 to 34 years of age, served as volunteer subjects. "The plan adopted was to give sixteen of them a diet virtually devoid of vitamin A and carotene until "unmistakable" signs of deficiency appeared, and then to determine what dose of vitamin A or carotene was needed to ensure recovery to normal. . . . After eight months of deprivation there was still no

discernible change beyond a lowering of the blood carotenoids. . . . Gradually there began to appear a drop in the vitamin A level of the plasma and a deterioration in the capacity for dark adaptation. . . . By these criteria no more than three men could be judged 'unmistakably' deficient and hence suitable for therapeutic tests, although several of the volunteers persisted with the diet for more than 18 months and one for over two years."—J. Brožek.

4068. Imus, Henry A. (U. S. Naval Sch. Aviat. Med., NAS, Pensacola, Fla.) **Comparison of Ortho-Rater with clinical ophthalmic examinations.** *J. Aviat. Med.*, 1949, 20, 2-23.—100 subjects were given 2 ophthalmological examinations each with the Ortho-Rater and with standard clinical tests of visual acuity, phoria, and depth perception. In general, the visual tests incorporated in the Ortho-Rater are about as reliable as clinical tests. Correlations between Ortho-Rater and clinical measures of visual acuity are high (r 's equal 0.83, 0.84, and 0.90); correlations between comparable measures of phoria or depth perception are lower (r 's range from 0.49 to 0.77). The results are presented in great detail in a large number of charts and tables.—A. Chapanis.

4069. Ivanoff, A. **Visual acuity in twilight vision.** *C. R. Acad. Sci., Paris*, 1948, 227, 234-236.—After adaptation to daylight, dark-adaptation produces an immediate fall in visual acuity when the test object is illuminated by 0.1 f.c. During the first 5 minutes in the dark, acuity rises and then falls, to rise for a second time after 9 minutes. The first rise is thought to be due to cone and the second to rod adaptation, the intermediate fall being possibly caused by an inhibition exercised by the rods on the cones as the former begin to dominate the retinal response.—(Courtesy of *Ophthalm. Lit.*)

4070. Knops, L. **Contribution à l'étude de la "naissance" et de la "permanence" phénoménales dans le champ visuel.** (Contribution to the study of phenomenal "emergence" and "permanence" in the visual field.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 562-610.—"Gamma movements . . . account for Explosion, Opening, Unfolding, and Growth. The first 3 are essentially cases of manifestations of phenomenal Emergence, of the instantaneously appearing sort. As for the last, it could . . . be considered . . . as an Emergence . . . of new material created by the burgeoning of a pre-existent mass. The function of contour, or at least of its mobile limits, accounts for the case of Permanence. . . ."—R. J. Ellingson.

4071. Lassalle, H. **L'évolution de la sensation lumineuse et la cinétique chimique des récepteurs rétiniens.** (Development of the visual sensation and the chemical kinetics of the retinal receptors.) *Arch. Sci. Physiol.*, 1947, 1, 285-306.—The first moments of vision of an illuminated screen are marked by fluctuations in sensation which do not attain a stable level until after one or more oscillations. The Charpentier bands and the Broca-Sulzer phenomenon show this property; similarly the after-oscillations in their chromatic components. On the basis

of purely photochemical reaction kinetics, equations are derived which can be made to fit, reasonably well, the observed data. 44 references.—(Courtesy of *Ophthalm. Lit.*)

4072. MacAdam, David L. (Eastman Kodak Co., Rochester 4, N. Y.) **Color discrimination and the influence of color contrast on visual acuity.** *Rev. Opt. (théor. instrum.)*, 1949, 28, 161-173.—Data are presented for one observer to show the effect of a black, a daylight, and a red surround on the standard error of a color match. There is no significant difference between the error for black and daylight but both are significantly different, it is said, from the error for red surround. A formula and charts are developed for interpolating between empirically determined ellipses representing color match standard errors throughout the ICI chromaticity diagram. These are necessary since ICI color space does not represent uniform visual intervals. Data are also presented which show the influence of color contrast on visual acuity. These show that when a target and background are not equiluminous, "acuity is the same as that produced by an achromatic contrast equal to the square root of the sum of the squares of the luminous contrast and the chromatic contrast," when the latter is properly evaluated.—R. W. Burnham.

4073. MacLeod, R. B. **The effects of "artificial penumbrae" on the brightness of included areas.** In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 138-154.—Using a rotating disc to obtain the graded contour of a shadow penumbra, it was possible to determine the effect of an "artificial penumbra" on the brightness of the included area when the direction, breadth, and steepness of the gradient were varied. It was found that a gradient approximately equal to that of a shadow penumbra produces changes in brightness exactly analogous to those of the normal constancy effect and that between undetermined limits the change increases with the increase in breadth of the gradient, but that with varying steepness of the gradient, the change varies in a simple way from the normal contrast effect to the normal constancy effect. It is concluded that "at least the simpler phenomena of brightness contrast and brightness constancy can be considered as functionally related to a single variable, namely, the gradient of excitation represented by the contour."—J. Willmott.

4074. Monnier, Marcel. (U. Zürich, Switzerland.) **L'électrorétinogramme de l'homme.** (The electroretinogram of man.) *EEG clin. Neurophysiol.*, 1949, 1, 87-108.—A method is given for perimetric electroretinography permitting the study of duration, intensity, color, and location of the light stimulus along with simultaneously recorded EEG. From the analysis of some 1800 records it is concluded that the human electroretinogram (ERG) is a Granit type E, the most characteristic feature of which is the positive b potential. This can be used to study the effect of intermittent light stimulation; flicker fusion normally occurs in the range of 20-26

flashes per sec. The latency of the b potential is inversely related to light intensity; its amplitude is positively related. Retino-cortical time is of the order of 50 msec., being more constant than α blocking time. These and other measurements provide useful information about the functional state of the visual system. English summary.—C. E. Henry.

4075. Otero, J. M., Plaza, L., & Salaverri, F. (*Institute of Optics, "Daza de Valdés," Madrid, Spain.*) Absolute thresholds and night myopia. *J. opt. Soc. Amer.*, 1949, 39, 167-172.—The use of spectacles for correcting night myopia has effected a 50% decrease in the absolute threshold of the dark-adapted eye. This is interpreted as indicating an increased brightness of the retinal image, at least for the binocular observation of target areas from 30 sec. to 10.5 min. in diameter. The effect holds true both in the fovea and at 3°, 9° and 15° eccentricity. The law relating absolute threshold to stimulus area is not altered over this range. It is suggested that determinations of minimum number of quanta necessary for stimulating the eye are in error by a factor of two, since the correction of night myopia would have halved this number.—L. A. Riggs.

4076. Piéron, Henri. Quelques données pour l'analyse des processus d'additivité dans l'excitation lumineuse. (Some thoughts on the analysis of the process of additivity in luminous excitation.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 111-122.—The limen of a flickering S with equal light-dark ratio and a frequency of 50-100/sec. and intensity, but a similar flickering S with a frequency of 5-10/sec. has a limen even lower than that for continuous stimulation although the quantity of light involved is 1/2 less. The writer explains this phenomenon in terms of processes of facilitation and inhibition at the level of the ganglion cells.—R. J. Ellingson.

4077. Piéron, Henri. (*Coll. France, Paris.*) Les spécificités chromatiques dans la latence des impressions lumineuses. (Chromatic specificity in the latency of luminous responses.) *Rev. Opt. (théor. instrum.)*, 1949, 28, 157-160.—Pulfrich's deduction that his chronostereoscopic effect could be used for heterochromatic photometry is said to be discredited by an experiment which shows that latency differences are still present when differently colored glasses, equated for perceived brightness, are placed over the eyes of observers. These latency differences vary with brightness level; there is a consistent latency difference between red (which has a minimal latency) and white light of the order of 3 to 4 milliseconds at 0.4 "nit" (candles per square meter), and an even greater difference between blue (which has a maximal latency) and red light. The apparatus, which was demonstrated to be highly accurate, consisted of a vertical white pin mounted on the edge of a rotating turn table and an identical vertical pin which was suspended from above. The observer's task was to adjust the position of the suspended pin by remote control to the apparent plane of the rotating pin as the rotating pin passed a given point

every two seconds. Numerous observations showed greatest variation at low brightness levels and least variation at high light-adapted levels.—R. W. Burnham.

4078. Ponzo, Mario. Forme et effets polychromatiques. (Form and polychromatic effects.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 123-129.—The author discusses briefly the variations in subjective polychromatic effects which can be achieved by varying the form and/or distribution of the areas in which the color stimuli are presented. The significance of these facts for the field of art is mentioned.—R. J. Ellingson.

4079. Rubin, Edgar. Some aspects of the relation between the apparent quickness of rotation discs and the brightness of their backgrounds. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 221-224.—Using 30 sheets of grey Zimmerman papers ranging from white to black as backgrounds for a rotating grey disc, it was found that the rotation appeared to be increasingly more rapid as the backgrounds were changed from a brightness similar to that of the disc to darker or lighter shades. Change in quickness, however, seemed less apparent in the change from backgrounds with greater difference to those with brightness similar to that of the disc.—E. G. Clegg.

4080. Satyasray, R. S. Night blindness. *Calcutta med. J.*, 1948, 45, 281-289.—Night blindness is exhaustively discussed, particularly from the nutritional angle.—(Courtesy of *Ophthalm. Lit.*)

4081. Schupfer, F. Ottica fisiologica e problemi della visione nei vari paesi dal 1939 al 1945. (Physiological optics and the problems of vision, 1939-1945). *Pontificia Acad. Scient.*, 1947, 113 p.—A review of the work done on physiological optics from 1939-1945 has been issued by the Pontificia Academia Scientiarum in Rome. The subjects treated include visual substances (pigments), the visual senses, electrical reactions, the visual function in relation to stimuli of colour senses, visual acuity, night vision, colour vision, spatial sense, entoptic phenomena, refraction, aniseikonia, accommodation, and contact glasses.—(Courtesy of *Ophthalm. Lit.*)

4082. Scott, Royston B., & Sumner, F. C. (*Howard U., Washington, D. C.*) Eyedness as affecting results obtained with the Howard and Dolman depth perception apparatus. *J. Psychol.*, 1949, 27, 479-482.—This study questioned whether results obtained with the Howard and Dolman depth perception apparatus are affected by eyedness of subjects. The subject had the task of equating a movable pole with a stationary one, 25 trials with the movable one in front and 25 trials in back of the fixed one which latter was 90 inches from the eyes. Right-eyed subjects tend to position the movable pole which was on their right more frequently to the rear of the stationary pole, and left-eyed subjects placed it to the fore of the stationary pole.—R. W. Husband.

4083. Sloan, Louise L., & Wollach, Lorraine. (Johns Hopkins U. Sch. Med., Baltimore, 5, Md.) Comparison of tests for red-green color deficiency. *J. Aviat. Med.*, 1948, 19, 447-455.—The authors present extensive data comparing results obtained on several tests of color vision: a 17-plate selection of the American Optical Company pseudo-isochromatic plates (see 20: 1818), the Rabkin pseudo-isochromatic plates, the Sloan anomaloscope (see 19: 629) and the Sloan Color Threshold Test (see 19: 74). Correlations between the tests all tend to be high, but the tests differ somewhat in their respective levels of difficulty. The choice of a color vision test for selecting aviation personnel depends somewhat on the stringency of the qualifying standards felt to be necessary. The Color Threshold Test has some merit for this purpose because it is a quantitative test and the qualifying cut-off score may be set at any desired level.—A. Chapanis.

4084. Smith, Daniel, & Mahoney, Marie M. (Interchemical Corporation Research Laboratories, New York.) Preparation and application of reproducible gloss standards. *J. opt. Soc. Amer.*, 1949, 39, 86-90.—A technique has been developed for applying a definite gloss to any desired surface. Polystyrene replicas of a standard surface are made in the form of extremely thin films which can be applied to the surfaces which are to be studied. In this way the factor of gloss can be held constant or varied systematically for various conditions of dominant wavelength, excitation purity, and luminous reflectance. It is hoped that the method will provide the necessary physical basis for a psychophysical evaluation of the gloss of colored samples.—L. A. Riggs.

4085. Spadavecchia, V. Studi sulla visione binoculare. I. Della visione binoculare in generale. (Binocular vision.) *Ann. Ottal. Clin. Ocul.*, 1947, 73, 742-751.—A brief review of the optical, anatomical, phylogenetic, and psycho-physiological problems of binocular vision.—(Courtesy of *Ophthalm. Lit.*)

4086. Springer, Donald A. Procedure and results of a visual skills testing program in the Piedmont public schools. *Amer. J. Optom.*, 1949, 26, 69-74.—Fusion, muscle balance, acuity at near and far, blurring produced by +1.00 sphere, color and depth perception were investigated. Members of the PTA each administered a portion of the test. The supervising optometrist reviewed final records and classified students as satisfactory (50.5%), borderline (26.5%), or requiring visual care (23%). Comparison with teachers' ratings indicated that students with satisfactory vision are more likely to perform well.—M. R. Stoll.

4087. Tansley, Katharine. (Inst. Ophthalm., London.) Electrophysiology of the retina. *Ophthalm. Lit.*, 1948, 2, 382-398.—This review of the advances in retinal physiology made possible by the development of the electrophysiological technique presents the published results of 1945-1948 together with a more general account of the main electrophysiological results with some indication of their significance.

Reference is made to Granit's "Sensory mechanisms of the retina" (see 21: 3846) which covers the work up to 1944 and from which the greater part of the information in this review is taken. The material is presented in two sections: (1) the electroretinogram and (2) the responses of single optic nerve fibres. 47-item bibliography.—A. J. Sprow.

4088. Thouless, Robert H. The experience of 'upright' and 'upside-down' in looking at pictures. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 130-137.—"One characteristic of the anisotropy of phenomenal space is that for the civilized adult there is only one position in which a picture can be placed to be seen satisfactorily." This is in the upright position. The author poses the question: does this superiority of the upright position depend on the orientation of the picture with respect to the head or with respect to the objects of the outside world? The answer is found by inverting the head (looking between the legs) and looking at material consisting of a picture similar to picture puzzles, in which one face is seen if the picture is held one way up and another face is seen if the picture is held the other way up. The results indicated that in the majority of cases perceptual organization is determined by head position and the phenomenal upright by geographical position. The striking feature of the whole experiment was the indication of exceptions to the rule rather than the rule which was stated above. Also from the experiment the author believes that perception is to be regarded as a reaction of the self to information provided by sense organs because there is no uniformity in unusual conditions of the organism showing themselves in the responses.—M. McAllister.

4089. Ul Hassan, M., & Chand Khanna, L. Level of vitamin A in the blood and its relation to dark adaptation and other observations. *Indian J. med. Res.*, 1947, 35, 59-79.—In this investigation the biophotometer test and the determination of the blood level of Vitamin A were carried out with a view to (1) surveying the state of Vitamin A in normal persons; (2) investigating the use of the biophotometer in detecting the early stages of Vitamin A deficiency; and (3) correlating the results of the dark-adaptation test and the Vitamin A content of the blood. The dark-adaptation test as carried out in this investigation was found to be a reliable means of detecting subjects with very low blood levels of Vitamin A in the absence of any other symptoms of Vitamin A deficiency. No definite correlation was observed between the dark-adaptation tests and normal or slightly sub-normal blood levels of Vitamin A. All subjects who responded badly to the dark-adaptation test showed a distinctly better response to the dark-adaptation test after the administration of Vitamin A.—(Courtesy of *Ophthalm. Lit.*)

4090. Webster, Harold. (U. California, Berkeley.) The distortion of straight and curved lines in geometrical fields. *Amer. J. Psychol.*, 1948, 61, 573-

575.—Three questions are raised on the basis of a previous article by Berliner and Berliner (see 22: 4772). Unless the entire field of radii, viz., crossed parallel lines, is kept in the central visual field it is easy to get another and quite different effect not mentioned by the above authors; namely, the effect of the radii bending toward the parallel. In addition, certain assumptions and treatment of formula are discussed.—S. C. Ericksen.

4091. Weekers, R., & Roussel, F. Clinical measurement of critical fusion frequency. *Documenta Ophthalmol.*, 1948, 2, 132-190.—The authors describe an apparatus for the clinical measurements of CFF, and advocate that the results should be interpreted by drawing iso-frequency "horopters." Physiological variations are small, while pathological anomalies produce marked defects. The differences between the temporal and nasal halves are related to differences in the calibre of the retinal vessels, and modifications related to the size of the pupil are determined mainly by the quantity of light entering the eye, and to a less extent by retinal adaptation. The alteration with age, similarly, is related to iris sclerosis and pupil size. Clinical applications are described.—(Courtesy of *Ophthalm. Lit.*)

4092. Wright, W. D. (*Imperial Coll. Science & Technology, London.*) Les courbes de mélange des couleurs enregistrées sur la fovea sous de très petits champs visuels. (Color mixture curves recorded for the fovea using very small visual fields.) *Rev. Opt. (théor. instrum.)*, 1949, 28, 174-182.—Fifty years ago König reported that a small central part of his fovea had visual properties characteristic of the tritanopic form of daltonism. That observation was ignored or placed in doubt until Willmer recently came to the same conclusion on a basis of observations which he made while using small test points. Color mixture curves and curves of hue discrimination were obtained by Willmer and Wright for the fovea, and later by Thompson and Wright for the part of the retina located at 20' and 40' of arc from the foveal center. These curves confirm the dichromatic nature of vision when very small visual fields are observed in the fovea, and they also demonstrate that the center of the fovea has a reduced sensibility to blue in comparison to retinal zones at 20' and 40' of arc from the center. These results are discussed together with the trichromatic characteristics of foveal vision using a visual field of 2 degrees.—R. W. Burnham.

[See also abstracts 4028, 4031, 4135.]

AUDITION

4093. Foster, Irving Gordon. The Doppler effect. In *University of Virginia, Abstracts of dissertations* . . . 1948. Charlottesville, Va., 1948, 137-141.—Abstract of Ph.D. thesis, 1948.

4094. Gemelli, A. La localisation des sons. (The localization of sounds.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 155-166.—The principal factor in the localization of sounds in the

experiments presented is not a simple head movement but a series of short, rapid head movements, which are involuntary and cease with the determination of the location of the sound source. Localization is the product of a complex process in which head movements are of great importance because they permit the subject to choose between possible directions, due to intensity and phase differences. The "director element" is the subject's body, to which the location of the sound source in space is related. Head movements cannot by themselves suffice to localize sounds if a psychological factor of direction (relative to the subject's body) does not intervene. Bibliography.—R. J. Ellingson.

4095. Jeffress, Lloyd A. (*U. Texas, Austin.*) Binaural phase difference and pitch variation. *Amer. J. Psychol.*, 1948, 61, 468-486.—There exists a pitch-difference that arises when the ears are stimulated simultaneously by a single source that moves from left to right. This is more a function of the phase-relations than the intensity-relations. The new pitch-difference may be in the same or opposite direction as that occurring when the ears are stimulated singly. A third difference arises when a tone applied to one ear is compared with one applied to both. This difference may be much larger than either of the others described and may be such that the tone heard through both ears is flat. The data give "... good support to the hypothesis that there is a central neural mechanism for the localization of sound, which requires the activity of both ears for its innervation, and which gives, often, a different pitch-experience from those arising through the activity of either ear alone." An hypothesis concerning the day-to-day changes of pitch is also presented. Five S's were used, each giving 80 observations during each sitting; 10 for each of the eight modes of presentation employed. Headphones, two oscillators, phase-shifting networks, an oscilloscope and other apparatus to determine frequencies, intensities were used.—S. C. Ericksen.

4096. Lüscher, E., & Zwislocki, J. (*U. Clinic for Oto-Rhino-Laryngology, Basle, Switzerland.*) Adaptation of the ear to sound stimuli. *J. acoust. Soc. Amer.*, 1949, 21, 135-139.—Adaptation is defined as the elevation of the auditory threshold following stimulation by another tone. Experiments show that adaptation is complete after 0.4 sec. and that return adaptation (i.e., return of threshold to normal) is complete within about 0.3 sec. The amount of adaptation is approximately proportional to the intensity of the stimulating tone when both threshold and adapting tone intensities are expressed in db. Binaural measurements show that the adaptation process is probably peripheral since no adaptation occurs when the tested ear is contralateral to the adapted ear. Adaptation by a tone of a given frequency raises the threshold for tones at other frequencies as well and the pattern of the raised thresholds is similar to that for masking by pure tones. This relation and other similarities to the masking relations suggest that masking depends primarily on

the adaptation of the ear to sound stimuli.—W. R. Garner.

4097. Wever, Ernest Glen, & Lawrence, Merle. (Princeton U., N. J.) The patterns of response in the cochlea. *J. acoust. Soc. Amer.*, 1949, 21, 127-134.—The patterns of distortion and maximum response for the cochlear potential have been determined. Below 1000 cps the level of cochlear response at which distortion begins, and the maximum level, are the same for all frequencies. Above 1000 cps these points are reached at progressively lower response levels until at 10,000 cps no true maximum is found. On the basis of these distortion data, various possible patterns of response in the cochlea are pictured. No tone at practical intensities uses all the cochlear resources because some sensory elements are stimulated so strongly relative to others that they become damaged before the others are fully involved.—W. R. Garner.

RESPONSE PROCESSES

4098. Baker, L. M., & Elliott, D. N. (Purdue U.) Controlled and free association-times with identical stimulus- and response-words. *Amer. J. Psychol.*, 1948, 61, 535-539.—Stimulus-response words were selected which elicited large percentages of common responses. All reaction-times were shorter in the controlled than in the free situation. "It appears that the effect of the instructions given in controlled word-association is to quicken the response-time. This holds for both opposite associations and part-whole associations, and there does not appear to be any evidence suggesting that it would not hold for other types of association as well." The Ss were 62 women and 83 undergraduate men. Each of the stimulus-words was presented to half of the Ss under free conditions and to the other half under controlled conditions.—S. C. Ericksen.

4099. Buytendijk, F. J. J. La durée des mouvements de dimension variable. (The duration of movements of variable dimension.) In *Miscellanea psychologica* Albert Michotte, (see 23: 4008), 297-307.—Experimental results are reported which confirm previous findings that large scale movements are executed more quickly than those of smaller dimension, but the relative durations of movement are not constant. The speed of execution of a movement is determined not only by its form but also by its size, i.e., it is determined by an "internal feeling of duration and appropriate speed."—R. J. Ellingson.

4100. Corrigan, R. E., & Brogden, W. J. (U. Wisconsin, Madison.) The effect of angle upon precision of linear pursuit movements. *Amer. J. Psychol.*, 1948, 61, 502-510.—Three experiments were performed to investigate the hypothesis that the precision of constant-velocity movements of the right arm is a function of angle from the body at which the movement is made. Ss tracked a target traveling at the rate of 3.0 cm per sec while moving a stylus down a 35.0 cm track, 0.4 cm wide. Twenty trials were given every S at all angles tested. The

practice-effect had disappeared in most cases by the first 10 trials. The apparent goodness of fits and the results of *t*-tests of differences in precision for successive angles are interpreted as strongly supporting the hypothesis that precision of constant velocity linear pursuit right-arm movement, y , is a trigonometric function of the angle from the body at which the movement is made.—S. C. Ericksen.

4101. Hayes, Keith James. A quantitative study of the cognitive and emotional effects of electroconvulsive shock in rats. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 184-186. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1947. (See 22: 2522.)

4102. Phillips, Marjorie. (Indiana U., Bloomington.) Study of a series of physical education tests by factor analysis. *Res. Quart. Amer. Ass. Hlth*, 1949, 20, 60-71.—Analyzing the results of 26 physical education tests applied to 200 college women by the Thurstone factor analysis technique, Phillips reports that (1) using a series of diverse tests "four factors emerged. Three factors are identified as speed, general strength and abdominal strength, the fourth is unidentified; (2) there is no common factor to the three agility tests other than speed; (3) the two motor ability tests have as common factors only speed and strength;" and (4) numerous other tests have fairly high correlations with speed and/or strength but otherwise appear to measure unique traits not common to other tests in the series. The author points out the exploratory nature of this study and emphasizes the need for further investigation to determine more exactly the traits measured by physical education tests.—M. A. Seidenfeld.

4103. Sauvage Nolting, W. J. J. de. Gedachten over honger- en liefdedrift. (Thoughts about hunger- and love-drive.) *Ned. Tijdschr. Psychol.*, 1948, 3, 429-450.—In hunger drive, which is meant as maintaining the individual, the "other" is assimilated with the "ego," whereas in love drive, which is meant as maintaining the species, the "ego" of the parents becomes in the child into the "other." Moreover, an essential, representative part of the somatic ego is separated in love drive; psychologically sex drive urges to the individual death. Sex drive is closely connected with the drive to die, the hunger drive with the drive to kill, the destruction of living beings. Sex drive wants to create new life and draws nearer to the death of the individual, hunger drive wants the individual to live and draws nearer to the death of others. The deepest strive of both drives is a strive for rest. The essential of both is: the replenishment of a psychical vacuum. With sex drive the general loving (erotic) is of heterosexual nature, with hunger drive of narcissistic nature. Author mentions the drive to breathe as a kind of hunger drive. Common in the hunger drive (also be hungry for knowledge) and sex drive (love for science) is: the want to swallow up, the want to take possession of something, the replenishment of a felt deficiency. Thus even the highest forms of science

and religion can be considered as cognated with the two fundamental drives, sex and hunger.—*M. Dresden.*

4104. Symonds, Charles P., & Williams, Denis J. The psychological aspects of airsickness. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 282-307.—This study was focussed upon the determination of the extent and the manner in which psychological disorder might be a factor responsible for airsickness. The study was made upon 120 men suspended for airsickness. The authors conclude that "when a man is suspended for airsickness at any stage of training, the cause is usually motion-sickness uncomplicated by psychological factors." However, the authors point out that psychological abnormality might coincide with airsickness without contributing to it. Suspension for airsickness seldom involves psychological factors as a major contributor. "Psychological factors are never the direct cause of true airsickness which should be clearly distinguished from visceral reactions to anxiety occurring in the air." 11 references.—*M. A. Seidenfeld.*

4105. Winch, Robert F. (Vanderbilt U., Nashville, Tenn.) Primary factors in a study of courtship. *Amer. sociol. Rev.*, 1947, 12, 658-666.—A multiple factor analysis is made on 465 intercorrelations previously reported in a study of the courtship behavior of a sample of 435 college men. 31 variables are summarized in terms of 5 primary factors plus 2 doublet factors. The factor analysis laid the basis for interpreting the major dimensions of the unknown domain, it provided a facsimile of the stereotype of the American middle class family, and it provided new clues for the development of more fruitful modes of conceptualization.—*H. H. Nowlis.*

[See also abstract 4115.]

COMPLEX PROCESSES AND ORGANIZATIONS

4106. Janet, Pierre. Caractères de l'hallucination du persécuté. (Characteristics of the hallucinations of the persecuted.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 237-253.—The hallucinations of the persecuted are distinguishable from those experienced by other clinical types (e.g., alcoholics) as follows: (1) they are almost invariably and exclusively auditory; (2) they are logical, i.e., they are related either directly or symbolically to etiological factors; and (3) they are almost always presented as memories, as past events, i.e., the patient does not hear his voice in the presence of others. These characteristics are not invariable. A brief theoretical discussion is presented.—*R. J. Ellingson.*

4107. Johnson, Warren R. (U. Denver, Colo.) A study of emotion revealed in two types of athletic sport contests. *Res. Quart. Amer. Ass. Hlth.*, 1949, 20, 72-79.—The purposes of this study were (1) "to explore the relationship of emotion and competitive

activities; (2) to compare pre-contest emotional reactions of participants in violent team sport (football) and in a combative sport (wrestling); (3) to compare objective type physiological testing with subjective contestant introspective testing of pre-competition emotion; (4) to check post-contest body adjustment as measured by subjective and objective phases of the testing;" and (5) based on these observations to develop practical applications of the findings. Using 15 experienced football players and 5 experienced wrestlers, the author applied introspective techniques to ascertain the emotional state of the contestants prior to a contest as well as an objective test based on heart rate, blood pressure, and blood sugar levels. The results obtained appear to indicate that, "while strong pre-contest emotion of the nature of fear and anxiety does not seem to be a particularly prominent factor in football, there is a strong indication that it is of serious importance in wrestling."—*M. A. Seidenfeld.*

4108. Langfeld, H. S. Concerning empathy. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 106-110.—In discussing the confusion about the concept of empathy, two points are emphasized: (1) there is no subjective perception of bodily movements, (2) the projection involved is an awareness of certain features of the object. Introspection and awareness of one's movements cause projection and empathy to cease. Empathic perception has a dynamic element which non-empathic perception lacks. The relation of empathy to the aesthetic attitude is discussed.—*J. Bieri.*

4109. Staudt, Virginia M. (Notre Dame Coll., Staten Island, N. Y.) The relationship of certain personality traits to errors and correct responses in several types of tasks among college women under varying test conditions. *J. Psychol.*, 1949, 27, 465-478.—120 college women were given tests of verbal analogies, arithmetical operations, and cancellation—under normal conditions, with caution to be accurate, and under tension conditions. Also all subjects took an intelligence test, two perseveration tests, and a personality inventory. Perseveration was found to be a significant error-producing factor. The more maladjusted the individual, as indicated by total adjustment score, as well as neurotic and schizophrenic patterns, the more errors made. In general errors were more significantly related to personality traits than were correct responses.—*R. W. Husband.*

4110. Williams, Denis J. Episodes of unconsciousness, confusion, and amnesia while flying. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 259-281.—A report based on the examination of 100 consecutive cases of flying personnel who had an episode of unconsciousness, confusion or amnesia while flying. The cases were divided on the basis of diagnosis and included 55 cases with neuroses in which the diagnosis was reasonably certain. Epilepsy was diagnosed "confidently in $\frac{1}{4}$ of all the cases and tentatively in another $\frac{1}{4}$." Epilepsy caused by fear was reported

in several instances with case histories included in the study. Cardiovascular instability, fainting through pain (barotrauma), aural vertigo, oxygen deprivation, and various psychological disorders are discussed as factors contributing to these states. An appendix covering a number of case reports is also included. 17 references.—*M. A. Seidenfeld.*

[See also abstracts 4234, 4462.]

LEARNING & MEMORY

4111. Cappellen, L., & Bouckaert, J. *Réflexes conditionnés et apprentissage.* (Conditioned reflexes and learning.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 284-296.—The authors distinguish "simple conditioned reflexes" from learning on the basis of extinguishability and the involvement of reward and punishment. Some raw experimental data are presented and related to the work of Brogden, and Miller and Konorski. The authors conclude that "learning consists of a chain of conditioned reflexes, the last element of the chain being . . . a stimulus which could be called useful to the organism."—*R. J. Ellingson.*

4112. Estomina, Z. M. *Razvitie proizvolnoi pamiaty v doskolnom vozrastie.* (The development of voluntary memory during the preschool age.) *Doshkolnoie Vospitanie*, 1947, 1, 28-36.—The experiment, including 1300 nursery school children and extending over a period of 7 to 10 days, consisted of the observation of the process of memorization and of recall, as well as of the effect of practice under 2 conditions: in play activity and under formal laboratory procedure. The material for both procedures was equated as to the level of difficulty and as to sequence. It was found that purposeful recall precedes purposeful memorization; the age of 4 to 5 is the turning point at which the mnemonic function becomes voluntary; involuntary memorization and recall develop into an autonomous function when the purposefulness of the task is perceived by the child; inner motivation (in the play activity) results in a more rapid crystalization of the process; practice in memorization and recall results in a greater awareness of the purposefulness and leads to an analysis and organization of the process; the practice of innerly motivated activity (play) is significantly more effective than that of a routine or mechanized procedure.—*M. G. Nemets.*

4113. Haagen, C. Hess. (U. Toronto, Can.) *Synonymity, vividness, familiarity, and association value ratings of 400 pairs of common adjectives.* *J. Psychol.*, 1949, 27, 453-463.—One variable in any learning situation is the materials involved; standardization of this aspect is imperative. Such has been done with nonsense syllables; and word frequencies have been tabulated. This study was to establish a scale of similarity of meaning, for studies of verbal learning, so that concomitant variation could be controlled or evaluated. 480 common two-syllable adjectives were scaled in terms of (1) similarity of meaning, (2) closeness of associative con-

nection, (3) vividness of connotation, and (4) familiarity. Samples, not the entire list, are presented.—*R. W. Husband.*

4114. Hull, Clark L. (Yale U., New Haven, Conn.) *Stimulus intensity dynamism (V) and stimulus generalization.* *Psychol. Rev.*, 1949, 56, 67-76.—Reaction potential seems in part to be a function of the stimulus intensity involved. This "stimulus-intensity dynamism is a monotonic function, increasing at a decreasing rate, of the logarithm of stimulus intensity." Stimulus-intensity dynamism is reduced to a ratio based on the point of origin of the generalization gradient, then combined multiplicatively with this gradient. 5 quantitative corollaries are deduced on this basis, 4 of which agree well with empirical findings.—*R. B. Ammons.*

4115. Montpellier, G. de. *Le problème du transfert des effets de l'exercice dans les activités motrices.* (The problem of the transfer of the effects of exercise in motor activities.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 341-370.—For responses of the right hand, consisting of catching balls rolling down an inclined plane, gain due to exercise is notably greater in the left half of the field (movement of flexion and adduction) than in the right half (movement of extension and abduction). Positive transfer is the result of similarity of operation and, more especially, the similarity of the schemes of neuro-muscular organization. Negative transfer is the result of an antagonism of the schemes of neuro-muscular organization.—*R. J. Ellingson.*

4116. Nuttin, Joseph. *La loi de l'effet et la finalité du comportement.* (The law of effect and finality in behavior.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 611-633.—Success or failure (defined by rewarded or punished Rs) in the Thorndikian sense, are not sufficient to explain the establishment of S-R connections. Lewin has shown that incompleting tasks are remembered better than completed ones. It is the element of the "open task" with its accompanying "task-tension" which is essential to reinforcement. The "open task" is manifest in Thorndike's experiments by the fact that, regardless of reward or punishment, the subject knows the task is to be repeated and it is therefore incomplete or "open." It is the openness of the situation, rather than the reward or punishment involved, which is reinforcing. Four experiments are described, which were so constructed that the subjects were led to believe that the tasks were completed as they went along and would not be repeated, thus creating a "closed task" situation. Under these circumstances the systematic application of reward and punishment to Rs failed to affect S-R connections significantly. Bibliography.—*R. J. Ellingson.*

4117. Postman, Leo, Jenkins, William O., and Postman, Dorothy L. (Harvard U., Cambridge, Mass.) *An experimental comparison of active recall and recognition.* *Amer. J. Psychol.*, 1948, 61, 511-519.—Two groups of 35 college students learned a list of 48 nonsense syllables under identical conditions of practice, 6 verbal presentations of the list in

random order. One group had a recognition-test first and a recall-test second, for the other group the order was reversed. Recognition was significantly better than recall but recognition is poorer after recall than before recall. But recall is better after recognition than before recognition. There is a high positive correlation between total scores on the two tests, 0.72. The hypothesis that weak associations, below the threshold for active recall, contribute to correct recognition is supported by an analysis of the *Ss'* wrong guesses on the recognition-test. "The basic difference between the two tests appears to lie in the minimal strength of association which they require for successful performance."—S. C. Ericksen.

4118. Renshaw, Morton J. The effects of varied arrangements of practice and rest on proficiency in the acquisition of a motor skill. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 33-36. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4119. Smith, Moncrieff H., Jr. Spread of effect and the probability bias hypothesis. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 190-192. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1947.

4120. Taylor, J. C. (*U. Cape Town, U. So. Africa.*) Behavior oscillation and the growth of preference. *Psychol. Rev.*, 1949, 56, 77-87.—Analysis of data published by Blodgett shows that Hull's hypothesis that behavioral oscillation has a constant standard deviation is untenable. By assuming that the standard deviation of oscillation is a decreasing function of habit strength, it is possible to derive a set of equations fitting Blodgett's data well. "It is further argued that if oscillation be regarded as an aspect of the spontaneous activity initiated by a drive, its standard deviation is likely to remain constant in situations where learning proceeds by secondary reinforcement, and to be a diminishing function of habit strength where reinforcement is primary."—R. B. Ammons.

4121. Thorndike, E. L. The influence of occurrence, reward and punishment upon connections that had already considerable strength. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 308-322.—Over 1000 English words were rated for pleasantness-unpleasantness on a 10-point scale by 64 educated adults. 800 of these words were arranged in 20 sets of 40 words each, 4 of value 10, 4 of value 9, 4 of value 8, etc., the 40 words being arranged in random order. These were read to 18 educated adults, who were to respond to each word with the value they thought a consensus of adults would attach to it. In some trials the experimenter merely recorded responses; in some he indicated wrong, close, or right. Detailed instructions were given for some trials; abbreviated ones for others. In some trials subjects were instructed not to think of the examiner's indication of right, close, or wrong between words; in others they were to spend the time

between words repeating to themselves the examiner's response. Evidence is presented to show that the mere occurrence of a connection strengthens it. The addition of a satisfying state of affairs strengthens it much more. The addition of an annoying state of affairs does not weaken it enough to counterbalance the influence of mere occurrence. The satisfying state of affairs or "reward" acts not only by giving the learners information which may cause useful memories, but also and much more, by a direct and immediate action on the connection.—O. P. Ruvsvold.

4122. Walker, Edward Lewis. Factors in vernier acuity and distance discrimination. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 193-197. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1947.

4123. Wilson, John Todd. The formation and retention of remote associations in rote learning. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 198-201. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4124. Young, Paul Thomas. (*U. Illinois, Urbana.*) Food-seeking drive, affective process, and learning. *Psychol. Rev.*, 1949, 56, 98-121.—"The present paper is a study of the theoretical implications of the writer's experiments upon food acceptance and the relation of this work to current views concerning food-seeking drive, affective process, and learning." It is concluded that affective processes exist in the rat, and a hedonic theory of drive is proposed. The drive strength associated with a food is a direct function of the degree of enjoyment of that food. The preferential food selections of the rat are regulated by the intensity of affective arousal by food contacts and the number and temporal distribution of the runs to the food. While rats run faster to a more palatable food, its palatability does not seem to affect the rate of learning to go to it. 39 references.—R. B. Ammons.

THINKING & IMAGINATION

4125. Canestrelli, Leandro. (*U. Rome, Italy.*) Alcune espressioni psichiche primordiali del principio di analogia. (Some primordial psychic expressions of the principle of analogy.) *Arch. Psicol. Neurol. Psichiat.*, 1947, 8, 221-237.—Analogical intuition which is used in child psychology, animal psychology, psychology of primitives, and abnormal psychology is the primordial method of understanding others. It is evidenced not only in the animism of primitive man but also in the social perception of children in whom language properly so-called has not yet developed. Analogical intuition supporting itself on an identity and non-contradiction of subject and object regards mimicry, gesture, motor behavior, external conduct in general of another person as expressions of inner states similar to one's own and thus is permitted to interpret from the outward behavior of the other person that the latter's inner

states are similar to one's own when manifesting such outward behavior. The limitations of analogical intuition include the possibility of psychic dissimilarity between individuals owing to age differences, training differences, etc.—*F. C. Sumner.*

4126. Fosberg, Irving Arthur. (Tulane U., New Orleans, La.) A modification of the Vigotsky Block-Test for the study of the higher thought processes. *Amer. J. Psychol.*, 1948, 61, 558-561.—When administered in the usual, standard way this test was found to be too easy for Ss above average intelligence. 2 modifications are introduced: to discontinue forcing a single solution upon the Ss and giving them hints or clues which lead to that solution; and, on the positive side, to accept as correct any and every solution offered that is logically consistent. On the basis of a try-out with 41 superior adults it is suggested that the modifications (1) permit S greater freedom in manipulating the blocks, (2) yield a large variety of solutions, which enable the examiner, (3) to score the results objectively, and (4) to interpret better the S's thought processes.—*S. C. Ericksen.*

4127. Heidebreder, Edna. (Wellesley Coll., Wellesley 81, Mass.) The attainment of concepts: VIII. The conceptualization of verbally indicated instances. *J. Psychol.*, 1949, 27, 263-309.—In this study two experiments differed from the previous ones in the series by using verbal phrases instead of drawing as means of providing the concepts the subjects attained. The first experiment (X) was performed by 40 subjects on a modified memory procedure, and the second (S₂) used 36 subjects on a card-sorting technique. Each subject was to attain 9 concepts: 3 of concrete objects, 3 of spatial forms, and 3 of numbers. The order of attainment of concepts in X was concrete, numbers, and spatial forms. In S₂ conceptual tasks were performed more quickly than in X, though less quickly than in earlier experiments in which drawings were sorted. Summarizing the series so far, the author says "they show a general trend indicating that conceptual achievements occurred more or less readily as more or less situational support was provided for effective perceptual participation in the performance of conceptual tasks. . . . The data indicate, too, that beyond the range in which instances were indicated verbally and symbolically, concepts were attained in an order determined chiefly by the semantic efficiency of the verbal tools."—*R. W. Husband.*

4128. Morselli, G. E. Esiste un'attività psicopatologica originale? (Does there exist an original psychopathological activity?) *Arch. Psicol. Neurol. Psychiat.*, 1948, 9, 297-306.—Autism, called prelogical thinking or affective thinking, is here viewed as an original autonomous psychopathological activity. As such, it is not to be regarded as a deficit, degradation, or dissociation of functions. Rather it is to be regarded as a psychological gestalting or integrating of an altogether different order. The contention is illustrated in the thinking of schizo-

phrenia and in the thinking of hallucination and dreams.—*F. C. Sumner.*

4129. Piaget, Jean. La soustraction des surfaces partielles congruentes à deux surfaces totales égales. (The subtraction of partial congruent surfaces from two equal surfaces.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 167-180.—This paper undertakes to investigate whether the Euclidean axiom—if 2 equal parts are subtracted from 2 equal quantities, 2 equal quantities remain—appears to be an axiom, i.e., to be an obvious truth, to children of different chronological ages.—*R. J. Ellingson.*

4130. Stephenson, W. 'Objective' processes in perceiving and thinking. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 225-236.—The author describes studies which attempted to define the conditions and describe the processes of "objective" thinking, and also indicate the conditions which favor such processes in the perceptual field as well.—*H. W. Jacob.*

4131. Weaver, H. E., & Madden, E. H. (Oberlin Coll., O.) "Direction" in problem solving. *J. Psychol.*, 1949, 27, 331-345.—"This study grew out of an attempt to find an experiment that could be included in a course in experimental psychology as a suitable example of a method used to study the complex form of human behavior called problem solving or reasoning." A repetition of Maier's experiment (see 4: 2907) was performed; that study was an attempt to show whether past experience, from which appropriate items may be selected, is sufficient for problem solving, or whether some relational entity called "direction" is necessary. The present study used 4 equated groups: (1) problem only; (2) problem plus relevant experiences; (3) problem plus "direction;" (4) problem plus experience and "direction." The problem was to build 2 pendulums over designated spots with poles, string, clamps, etc., furnished. A 25 minute time limit was enforced. 10 of 52 subjects solved the problem, college intelligence scores being randomly distributed. As to groups, 6 who solved the problem had been given hints, but 4 also came from group (1). Past habits and backgrounds of the subjects are discussed in terms of their attempts at solution.—*R. W. Husband.*

[See also abstracts 4044, 4236.]

INTELLIGENCE

4132. Blake, Robert R. (U. Texas, Austin.) The relation between childhood environment and the scholastic aptitude and intelligence of adults. *J. soc. Psychol.*, 1949, 29, 37-41.—40 men and 34 women college students completed the Sims Score Card for Socio-economic Status (as of 12 years of age) and the following scholastic aptitude and intelligence tests: Miller Analogies (Form G), Cattell Culture-Free Intelligence, and Amer. Council on Educ. Psychological Exam. (1941). Significant positive correlations were obtained between socioeconomic status and all measures of scholastic

aptitude and intelligence. Education of parents and level of occupation showed most pronounced relationship with high intelligence test scores. The author concludes that "residual effects of childhood socio-economic level are reflected in the scholastic aptitude and intelligence test performance" of his subjects. He suggests "the need for more rigid selection in the direction of greater homogeneity of background in factorial or other kinds of investigations designed to describe the nature of mental endowment."—J. C. Franklin.

4133. Fransen, F. Les facteurs caractéristiques dans le rendement pratique de l'intelligence. (Character factors in practical intellectual achievement.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 412-428.—The failure to achieve a perfect correlation between intelligence test results and intellectual achievement is examined. The author concludes that while socio-economic factors and the like are of some importance in explaining less-than-perfect correlations, their influence is minor compared to that of "character" (perseverance, ambition, etc.) factors, except where the former conditions are extremely poor. These character traits are further considered not to be innate, but to be learned habits, and therefore teachable.—R. J. Ellingson.

4134. Tate, Merle W. (Hamilton Coll., Clinton, N. Y.) Individual differences in speed of response in mental test materials of varying degrees of difficulty. *Educ. psychol. Measmt.*, 1948, 8, 353-374.—This study was undertaken to determine whether speed of response was a factor independent of altitude and of the particular function in which it is measured. 36 high-school students were given tests of arithmetic reasoning, number series completion, sentence completion, and spatial relations. In each test, the subject's speed of response to an item was measured by the number of seconds taken to complete the item. (These speed scores were then converted into common logarithms). With accuracy effect controlled, subjects fast in response to items at one level of difficulty tended to be fast at other levels. Subjects fast in one test also tended to be fast in the other three, although these intercorrelations were lower than those among levels of difficulty within a single test. Correlations of speed with altitude (sum of the scaled values of the items answered correctly) were negligible for all four tests. "That there was an independent factor of speed operative throughout a wide range of difficulty appeared statistically certain."—E. Raskin.

[See also abstract 4160.]

PERSONALITY

4135. Mull, Helen K. (Sweet Briar Coll., Va.) Myopia and introversion. *Amer. J. Psychol.*, 1948, 61, 575-576.—Using the Bernreuter Personality Inventory with 100 college women, "myopes show a slight but consistent tendency toward greater introversion than normal-visioned students . . . but since this tendency is slight, and since neither

the degree of myopia nor the length of time during which glasses have been worn has any significant relation to degree of introversion, it may be inferred that myopia is a relatively unimportant factor for introversion."—S. C. Ericksen.

4136. Rutten, Th. Persoonlijkheid in de spiegel der samenleving. (Personality as judged by others). In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 391-411.—On the basis of interviews, etc., the author tries to find the main characteristics by which we judge the personality of others.—M. L. Reymert.

4137. Schönberger, Stephen. Disorders of the ego in wartime. *Brit. J. med. Psychol.*, 1947-1948, 21, 248-253.—The traumatic experiences of war (hatred and destruction) lead to depersonalization. This new "war" ego forms a "peace" ego (somewhat differing from the pre-war ego) when the feeling of reconstructive omnipotence appears. Observations by patients in psychoanalytic treatment (interrupted by the war, but resumed thereafter) provide some of the data. For those sent to concentration camps, the moment of ego change was often identified with the substitution of rags for their own clothes.—E. R. Hilgard.

4138. Sumner, F. C., & Johnson, Edward E. (Howard U., Washington, D. C.) Sex differences in levels of aspiration and in self-estimates of performance in a classroom situation. *J. Psychol.*, 1949, 27, 483-490.—Men and women in General Psychology were asked to indicate their scores on 13 objective half-hour tests under conditions, and with average results, as follows: "From the means of the daily averages of the class as a whole it is found that actual performance is 14.8 points lower than the level of aspiration before seeing the test; 8.8 points lower than the level of aspiration after seeing the test; 3 points lower than the self-estimate of performance at the end of the test; 2.4 points lower than the self-estimate of performance 24 hours after the test; 0.4 points higher than the last performance." Goal discrepancies and aspiration discrepancies are in every case lower in the case of women. Discrepancies are lower in the top than in the lower quarter of the class.—R. W. Husband.

[See also abstracts 4256, 4269, 4392.]

AESTHETICS

4139. Bergler, Edmund. Psychoanalysis of writers and of literary productivity. In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 247-296.—An analysis of the unconscious motivation and dynamisms of literary productions is presented from a psychoanalytic viewpoint.—N. H. Pronko.

4140. Da Silva, A., & Sousa, —. Alguns aspectos psico-analíticos da visão e da deformação estética nos olhos dos artistas. (Certain psychoanalytical aspects of vision and aesthetic deformation in the eyes of artists.) *Bol. Soc. Portuguesa Oftal.*, 1946-1947, 5, 301-303.—An attempt to correlate

certain peculiarities in the work of artists with optical errors in their eyes.—(Courtesy of *Ophthalm. Lit.*)

4141. Garnier, Michel. *Un essai de psychagogie*. (An application of psychology.) *Psyché*, 1947, 2, 1407-1413.—The application of psychology to the field of drama was undertaken by a group in May, 1946, which formed the E.P.J.D. (Education for Dramatic Groups). There are 3 distinct types of membership, namely, trainers, actors, and educators. The aims, ambitions, and hopes of the group, the problems for which solutions will be attempted, as also the progress made, are described and explained.—O. I. Jacobsen.

4142. Hart, W. A. *Over een mogelijk heuristische betekenis van het literaire kunstwerk voor de methodiek der psychologie*. (About the possible heuristic aspect of the literary work of art important for the methodology of psychology.) *Ned. Tijdschr. Psychol.*, 1949, 4, 57-69.—After a scientific theoretical comparison between the intuitive knowledge of the artist and psychological knowledge, it is supposed that the psychologist in cooperation with the aesthete can test the integral work of art on the knowable connection of psychic processes. That part of the inner structure not falling entirely within the sphere of thought, the intuitive analysis of the non-rational rest, may then in its projective character be tested by the psychologist on the resultant of the knowable psychic potentialities. The eidetic vision of the artist reducing the non-essential accidental circumstances may find its formulation by a psychological "Hermeneutik," in which the inner meaning of what has been depicted, may be suspected. 26 references.—(Rewritten; courtesy *Ned. Tijdschr. Psychol.*)

4143. Jury, Paul. *Une nuit de Racine*. (A night with Racine.) *Psyché*, 1947, 2, 1480-1500.—In considering M. Mauriac's "The Life of Racine," the author calls attention to events at various ages of Racine's life, wherein there are psychological developments. He also points out those events which had a profound influence upon Racine's writings. Several selections of Racine's poetry are presented and interpreted in the light of psychological significance.—O. I. Jacobsen.

4144. Nicola, Pietro de. (U. Pavia, Italy.) *Sulla presunta psicopatia ossessiva e dissociativa del poeta R. M. Rilke*. (On the alleged obsessive and dissociative psychopathy of the poet R. M. Rilke.) *Arch. Psicol. Neurol. Psichiat.*, 1948, 9, 363-374.—A personality diagnosis of the German poet, Rainer Maria Rilke (1875-1926) is made upon the basis of his life and works, particularly his "Aufzeichnungen des Malte Laurids Brigge" (1909), and the literature pertaining to the Rilkean psychopathology. Rilke is diagnosed by the present writer as of schizothymic constitution within the limits of normality, predisposing him to timidity, reserve, haughtiness in childhood; to isolation, rigidity towards himself, dreamy, idealistic tendency, detachment from the external world, introspection in his adolescence and adulthood. Dissociation is not complete as other students

believe. It is doubted that Rilke had obsessive psychosis other than a heavy preoccupation with esthetic and philosophical problems in the Paris period during which he wrote "Malte Laurids Brigge."—F. C. Sumner.

4145. Oberndorf, Clarence P. *Psychoanalysis in literature and its therapeutic value*. In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 297-310.—While many psychoanalytic studies of literary compositions of famous authors have sought to trace the unconscious drives of the writer and their conversion into various sublimated interests (analogous to the experiences of psychiatric patients) without regard to possible personality changes in the writer, an analysis of Nathaniel Hawthorne's writings demonstrates the general inadequacy of confessional writing in effecting any fundamental personality improvement.—N. H. Pronko.

4146. Paulus, Jean. *Les deux visages de Stendhal*. (Two views of Stendhal.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 429-439.—The personality of Stendhal is explained upon the basis of psychoanalytic principles. The Oedipus Complex is particularly invoked. Stendhal was extremely attached to his mother, and was jealous of and hated his father. After his mother died, during his 8th year, he continued to hate his father and, as a consequence, all established authority, which symbolized his father to him.—R. J. Ellingson.

4147. Servadio, Emilio. *Psichanalyse de l'art hypermoderne*. (Psychoanalysis of modernistic art.) *Psyché*, 1947, 2, 1501-1506.—This is neither a defense nor condemnation of modernistic art, but rather an attempt to explain its development, which is done by use of Freudian psychoanalysis. It is the reaction to the accepted, a transfiguration, where perhaps the "artistic message" is lost or misunderstood. Factors of influence are curiosity, fantasy, satisfaction, reaction to complexes and to conflicts. Formal beauty based on order, harmony, and balance, are thrown overboard in revolt against their acceptance, and reality is claimed, similarly to modernistic trends in literature, music, and other fields.—O. I. Jacobsen.

4148. Wulf, M. *L'mahuta shel haomanut*. (About the nature of art.) *Ofakim*, 1947, 4(3), 2-9.—A psychoanalytical approach based on experiences of a physician. Art, religion, and science are 3 ways of comprehending the world. Art originates in animism, which is man's projection of his soul into nature. All kinds of art (music, drawing, dancing, theatre) were magic practices to influence the world according to his wishes. After the animistic period came the religious, but the art expressed the religious feelings too, and it did not disappear in the secular period. Hence art does not develop like the other kinds of comprehending the world. It is to be understood on the base of the difference between the ego (connected with science), the super-ego (connected with religion), and the id (connected with art). "Art is man's activity that lets his unconsciousness influence directly the unconsciousness of others. It gives

him consolation and compensation of satisfaction instead of resignation which culture had forced upon him and enriches his life by feelings of happiness."—*H. Ormian.*

[See also abstract 4170.]

DEVELOPMENTAL PSYCHOLOGY

CHILDHOOD & ADOLESCENCE

4149. Arkin, E. A. *Gigiena dooshevnoy zshizni rebionka.* (The hygiene of the mental life of the child.) *Semia i Shkola*, 1948, (Jan.) 13-17.—The ancient dictum of "a healthy mind in a healthy body" is correct, but onesided. The reverse is equally true: mental and emotional health are the bases of physical health. The physiological and the psychological phenomena in the human body are interactive, so that changes in one sphere affect changes in the other. Contemporary physiological studies reveal that the human organism is under the direct influence of the nervous system, which through a network of cells and neurons controls the functions of the internal organs, as well as of the chemical processes. Due to this all-embracing organization of the nervous system there is a marvelous unity and harmony among the numerous functions of the organism. The disturbance of the nervous system, therefore, results also in the disturbance of the bodily functions. The effect of such a disturbance is even greater in the child because of the frailty and flexibility of its psyche. Parents must guard the child's mental health as they do its physical welfare. The child's nervous system should be protected from trauma, fatigue, and disturbance.—*M. G. Nemets.*

4150. Arkin, E. A. *Gigiena dooshevnoy zshizni rebionka.* (The hygiene of the mental life of the child.) *Semia i Shkola*, 1948, (Feb.), 12-15.—Several conditions are essential to the child's mental health: a sense of joy of living and well being; love, tenderness, attention; faith in one's self and in one's abilities; a full life and absorbing interests. The joyous spirit of the child derives from the home, from its general atmosphere and intrapersonal relationships. Morbidity, censorial attitudes and repressive measures tend to depress the child. Physical surroundings and physical care are contributing factors. Love, tenderness, attention are undeniable needs, which must be gratified in the child in order to effect a wholesome development. Love stimulates and strengthens the child, enabling it to mobilize its energies to the fullest. No degree of scientific upbringing can compensate for this factor. Emotionally deprived children have shown marked recovery from depression and withdrawal as a result of kindness and attention. Love, however, is not to be confused with over-indulgence, which leads to the development of ego-centricity, tyrannical attitudes, and wilfulness. Play is the first step to a productive life and should be respected and encouraged. Gradually and in proportion to its developmental level the

child should be introduced to constructive work.—*M. G. Nemets.*

4151. Arkin, E. A. *Gigiena dooshevnoy zshizni rebionka.* (The hygiene of the mental life of the child.) *Semia i Shkola*, 1948, (Mar.), 19-22.—There are 2 conflicting theories in regard to child discipline: that which demands absolute obedience and acceptance of authority and that which advocates unrestricted freedom. Neither one is ideal. Unrestricted freedom may result in the development of many undesirable characteristics, while absolute authority may lead to spiritual flabbiness and weakness of will. The demands upon the child must be commensurate with its developmental level. It should be led from absolute obedience to self-reliance, to self-discipline, and finally to adulthood, when it is enabled to rise to the defense of its rights and its individuality. This requires not only knowledge of child development, love and respect for the child, but great tact and self-possession on the part of the adults. The child is a social being and craves social associations of an ever increasing scope. This feeling should be fostered and suitable contacts provided. In its early stages of development, the child perceives the world as a mosaic, undifferentiated pattern. It is imperative that it be taught not only accurate facts, but critical and evaluative thinking as well.—*M. G. Nemets.*

4152. Bender, Lauretta. (New York U. Coll. Med.) *Genesis of hostility in children.* *Amer. J. Psychiat.*, 1948, 105, 241-245.—The emphasis on the inborn or instinctive features of hostility, aggression, death wishes, and the negative emotional experiences, according to the author, represents a one-sided approach which has led students of child psychology astray. From her past and recent observations, the author concludes (1) that the child has an inherent capacity or drive for normality; (2) that the child has an inborn capacity to relate to the mother or parent figure and by this identification is able to experience the emotional things of life; (3) that the child has an inborn capacity for an internal fantasy life which follows the pattern toward normal maturation. The author discusses disorders of childhood in which hostility is emphasized: organic conditions, psychopathic states and schizophrenia in children. 20 references.—*R. D. Weitz.*

4153. B'rakhyahu, M. *Livriuto haruhanit v'hanafshit shel haben hayahid b'erets israel.* (About the mental health of the only child in Israel.) *Higena ruhanit*, 1948/49, 6, 125-132.—A questionnaire was administered to teachers and social workers dealing with the behavior of only children, pupils of secondary schools. The characteristic traits of only children were not found in Palestinian youth. The kindergarden is the pedagogical agency which improves successfully most of the negative influences of being an only child. Generally there are no differences in this respect between girls and boys—only and not only children; but only child girls are more helpful, more social, less anxious and more obstinate than only child boys.—*H. Ormian.*

4154. **Choisy, Maryse.** Questions controversées—La problème de la punition. (Controversial questions—the punishment problem.) *Psyché*, 3, 1948, 258-268.—There is much disagreement and controversy on many psychological problems, and especially those of psychoanalytical nature, wherein interpretations may be involved. One of the most outstanding controversies is that of child-training, in which punishment should or should not be a practice. Other methods of stimulation, such as praise, which is a Montessorian guide, are explained, but which may bring extremely different results, depending upon the individual child. Use and outcome of punishments are suggested, including: isolation, appeal to sentiment, threats, taking away privileges, promise of rewards, depriving of food, and letting the child suggest his own punishment. Evils and good points of both praise and punishment are explained. A case is presented which is that of a pampered child, wherein neither punishment nor praise is effective.—O. I. Jacobsen.

4155. **Doumic, Alice.** (Ancien Interne des Hôpitaux de Paris, France.) Certain nutritional problems as related to child behavior in France. *Proc. Conf. Child Res. Clin. Woods Schs.*, 1948, 17-20.—The effect of malnutrition on the physical growth of children in France is described. The part malnutrition played in producing changes in the physiological and psychological development of children is illustrated by discussing the development of war amenorrhea and the increase in the amount of stealing that occurred among children.—L. Long.

4156. [Faegre, Marion L.] Your child from 6 to 12. *U. S. Child. Bur. Publ.*, 1949, No. 324, ii, 140 p.—This manual is written for parents in an attempt to describe the problems of physical and mental growth of the school age child. It discusses such problems as the child and the family, play, the home and school, everyday behavior problems, children's hobbies, money, sex attitudes, and physical and mental growth.—C. M. Louttit.

4157. **Fontes, Vitor.** (Instituto Coasta Ferreiro, Lisbon, Portugal.) L'agressivité enfantine et la vie familiale. (Infantile aggression and family life.) *Criança portug.*, 1947-48, 7, 347-362.—Aggression in prepubescent children often has an anatomical, extrapyramidal basis, located in the hypothalamus and is linked with primary phases of instinctual life, although most children's aggressions are connected with frustration. These aggressions are often transferred into psychosomatic symptoms such as enuresis or into anti-social behavior. After puberty, sexual aggression may occur, but fortunately this is often inhibited by the adolescents' environment and new interests in the social world. Scouting, religious interests, patriotism, and other social factors force sublimation of aggressive impulses. 5 circumstances are to be considered in the case of intra-familial aggression: the oedipus complex, inferiority complex, family constellation (sibling rivalry), poorly handled parental authority, and bad family organization. The family milieu is the most convenient for the

development of the affective life of the child. Concrete suggestions for improving the milieu of the family are suggested.—R. J. Corsini.

4158. **Golan, Sh.** Lidmuto shel hanoar shelanu. (About the appearance of our youth.) In *Dor lador*. (Generation into generation); a record of the Hashomer Hatsair Central School at Mishmar Haemek. Merhavia: Sifriat Poalim, 1948, 33-63.—The traditional school has failed, because it had neglected the social factors of adolescence. We have to analyse the development of our youth not only from the biopsychological standpoint, but also from the sociological, demographical, and historical. The Jewish adolescent in Palestine is to be understood on the background of the political and social history of the Jewish immigration into Palestine. He is healthy, sincere and skilled, but there is a lack of culture, and his way of life is primitive. The youth of communal settlements grows up in specific conditions, and there are being crystalized 4 types within them: (1) The positive type—well adjusted, loves his communal settlement, agriculture and work, and is interested in intellectual-cultural problems. (2) The simple type—more "natural," noisy, neither problematic nor interested in intellectual problems. (3) The subtle type—similar to the positive type, but more introverted, more "ideological" and subjective, also dealing with the cultural functions of his youth-society. (4) The infantile type—his level of general development is that of a 12 year-old in the physiological age of 16 years.—H. Ormian.

4159. **Kluckhohn, Clyde.** Some aspects of Navaho infancy and early childhood. In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 37-86.—The present article constitutes a first technical report of a study of a group of Navaho children, a study going on since 1936 and dealing with such features of the first few years of life as the daily routine of the baby in the cradle, nursing, weaning, and toilet training.—N. H. Pronko.

4160. **Knehr, Charles A., & Sobol, Albert.** (Cornell U. Med. Coll., New York.) Mental ability of prematurely born children at early school age. *J. Psychol.*, 1949, 27, 355-361.—The authors checked the common notion that premature infants are more likely to be below par mentally than those born at normal term. 99 children, of a possible group of over 200, were assembled for administration of the Otis Alpha Form A group test. Possible sampling factors did not seem to favor either controls or prematures. Mean IQ was 98.2. Incidence of defect was not any greater than estimated as characteristic of the general population. A correlation of .20 was obtained between birth weight and IQ at early school age, but this is too small for individual prediction.—R. W. Husband.

4161. **Maranz, Georges.** Le conflit entre pères et fils. (The conflict between fathers and sons.) *Psyché*, 1947, 2, 1443-1452.—The author cites instances of conflicts and complexes between fathers and sons, in history, and in normal life. He states

that these conflicts may be due, in part, to the self-preservation instinct and other normal tendencies. Freud's concept of such conflicts is explained as having a sexual background, as well as the survival tendencies. Various types of identity are explained and described. Tradition plays a great part in these conflicts, as also do values, survival, and progress.—*O. I. Jacobsen.*

4162. Mushkatbluet-Cohen, Shoshana. *Yomana shel em.* (A mother's diary.) Merhavia: Sifriat Poalim-Hinukh, 1949. 311 p.—This is a diary of Miriam, written by her mother during 3 years and 7 months from May 1937 until December 1940; in the book are also 7 pages "About the Book" written by the Editor. The novelty of this diary is that it was written in a communal settlement of Jewish agricultural workers in Israel, where children are nursed and brought up in special children's houses, and not in their parents' living rooms. Hence, the mother saw her daughter only for a few hours during the day. The diary is objective, without either "explanations" or a sentimental or belletristic tone.—*H. Ormian.*

4163. Nassau, E. *B'ayot r'fuiyot b'vate hay'ladim bakibuts.* (Medical problems in the settlement children's house.) *Harefuah*, 1948, 34, 34-38.—Some problems of physical development, care, and education in the children's houses in the communal Jewish settlements (kibutsim) are reviewed. The dangers of the hot season and those of the cold season are considered. Arrangements in children's houses are criticised. Problems of the defective child and the child of divorced parents are discussed. The custom of using common bed- and wash-rooms for both sexes up to the age of maturity is regarded as undesirable for the psychic development. It is suggested to improve the living conditions for older children, the daily schedule, and the working hours both during school time and holidays. Mutual relations of the children within the same group are discussed, also the relations of the child to the nurses and to the parents, and the particular situation of the nurse in the communal children's house. Although many things need to be changed in the communal children's house, a healthy generation is growing up in this particular environment.—*H. Ormian.*

4164. Ormian, H. (Hebrew U., Jerusalem.) *L'ofi hahitbagrut shel b'ne adot hamizrah.* (About the traits of the puberty of the Oriental communities.) *Alon lamore*, 1946, No. 2, 4-9.—The education and the instruction in the evening schools and courses of the "Working Youth" must be founded upon the social psychology of their pupils. Almost all the special features of their puberty depend on the specific conditions of their life, i.e., a great number of lodgers per room, and of children per family, the non-satisfying school attendance, working of young children, parental authority of ancient style, physical puberty without intellectual processes characteristic for the adolescence of secondary-school pupils, the sexuality is rather physical and external, political matters appear first of all as a superficial propaganda,

reading of books is very rare, profound joy rarely appears, leisure time is empty, and social life is similar to that in the last years of the childhood, and there is an inferiority complex against the Occidental or European Jews. All these conditions stimulate their growth during their shortened adolescence period.—*H. Ormian.*

4165. Ormian, Haim. (Hebrew U., Jerusalem.) *Psikhologia shel hahitbagrut.* (Psychology of adolescence. Readings.) Jerusalem: Jewish Agency for Palestine, Dept. of Youth Immigration, 1948. 54 p.—Readings for seminaries, for youth-leaders, and for youth-instructors in groups of Youth-Immigration. The contents: The developmental psychology nowadays; what is meant by psychic development; what is meant by adolescence (opinions of some "schools"); the social psychology of the adolescent, especially of the Jewish and of the Palestinian one; adolescent's personality—normal and deviated; educability and maturity. 51-item bibliography.—*H. Ormian.*

4166. Pesareva, L. V. *Nervniye dietee v domie.* (Nervous children in the home.) *Semia i Shkola*, 1948, Jan., 32-33.—Nervousness in children manifests itself in various ways: talking, crying, or tossing in sleep; stuttering; twitching of the facial muscles; crying spells; irritability; fearfulness. Nervous children may be hyperactive or phlegmatic. Their nervousness has its roots in the relationship of the adults toward them: use of fear as a means of control; inconsistency in the discipline; family discord; the venting of the adult's mood upon the child; repression of free activity. The latter is especially common and destructive. Constant demands for inhibition, which according to Pavlov's findings develops late in the child, fatigue it to excess and create nervous tension. Well routinized personal-hygiene habits strengthen the child, whereas disorganization of routine is taxing to the nervous system and renders children irritable. Both, physical and moral strength are necessary to insure the normal and wholesome development of the child.—*M. G. Nemets.*

4167. Rosenberger, L. *Hay'ladim bamilhama.* (The children during the war.) *Ofakim*, 1948, 5(3), 15-22.—The real danger of war influences children's fear only indirectly. The real origin of fears and phobias lies in the child itself, in the inner conflict between aggressive impulses and the conscience. The children were frightened, when they were suddenly taken at night into a shelter because of the "alert," especially when nurses and mothers did that not in a quiet way. In war-time the complete processes of sublimation seem to decrease and the impulses of aggression to increase. In some situations the above mentioned conflict may produce fear and other children's affects and drives. This situation involves many educational and ethical dangers. Parents' and educators' conduct are a real condition in increasing or decreasing fear, fright, and other undesirable emotional kinds of behavior.—*H. Ormian.*

4168. Ross, Helen, & Johnson, Adelaide M. (*Inst. for Psychoanalysis, Chicago, Ill.*) **Psychiatric interpretation of the growth process: Part I.** *J. soc. Casewk.* 1949, 30, 87-92.—The importance of the earliest years in the growth process is emphasized. Experiences with respect to food, love, and the first steps in learning are pointed up as the basis for adjustment. The problems that arise during the first emotional triangle and the normal outcome of this period are recognized. The growth of conscience and the various defense mechanisms used to escape discomfort are described.—V. M. Stark.

4169. Ross, Helen, & Johnson, Adelaide M. (*Inst. for Psychoanalysis, Chicago, Ill.*) **Psychiatric interpretation of the growth process. Part II: Latency & adolescence.** *J. soc. Casewk.* 1949, 30, 148-154.—Discussion of the latency and adolescence periods, and the physiological changes and psychological adjustments involved. The necessity for developing inner security is pointed up in order to have future healthy emotional adjustment and acceptance of adult responsibility.—V. M. Stark.

4170. Sakulina, N. P. **Risunki doshkolnikov k literaturnim proiesviedeniam.** (The drawings of pre-school children for literary works.) *Doshkolnoie Vospitanie*, 1947, 3, 9-18.—Disputing the artist Charushin's contention that the reproduction of literary contents in children's drawings tends to deplete their creative spontaneity, the author cites an experiment with 10 upper nursery school classes over a period of several months. The literary material was analyzed as to the basic ideas, plots, imagery, verbal quality, emotional tone, and appeal to children. The educators received training in the effective presentation of the material, with emphasis on distinct episodes, emotional tone, and verbal imagery. At first the literary productions were read to the children in toto for general effect. More difficult concepts were clarified at subsequent sessions through discussions or actual experiences. A brief review of the contents preceded the drawing period, accompanied by concise and specific directions. Book illustrations were withheld to prevent imitation. Focus on technique was at a minimum. The results were gratifying. The children's technical skill, interest in art, analytical ability, and appreciation of literature increased perceptibly. The drawings revealed a growing variety of component elements and a marked enrichment of contents. The children's verbal facility and sensitivity to verbal imagery expanded through the group evaluations of the drawings.—M. G. Nemets.

4171. Winnicott, D. W. **Pediatrics and psychiatry.** *Brit. J. med. Psychol.*, 1947-1948, 21, 229-240.—The research worker in either pediatrics or psychiatry has much to learn from the research worker in the other field. 9 types of approach to the study of the emotional development of infants are listed: (1) direct observation of infant-mother relationship, (2) periodic observation of an infant, continuing over a period of years, (3) pediatric history taking, (4) pediatric practice (management of feed-

ing and excretion), (5) diagnostic interview with the child, (6) psycho-analytic experience, (7) observation of psychotic regressions appearing in childhood, (8) observation of psychotic children in homes adapted to cope with symptoms, and (9) the psycho-analysis of schizophrenics. As illustrative of the importance of childhood, the main emphasis is upon the development of contact with shared reality. The mother plays an important role in this. The loss of reality contact produces many of the symptoms of concern to the psychiatrist.—E. R. Hilgard.

[See also abstracts 4112, 4129, 4219.]

MATURITY & OLD AGE

4172. Allen, Edward B. (*Payne Whitney Clinic, New York Hospital.*) **Psychological orientation in geriatrics.** *Geriatrics*, 1949, 4, 67-73.—"Geriatrics must direct its attention to the thoughts and feelings of the aging as well as to their morphology and physiology." Fatigue is a major symptom of senescence, often occurring around the age of 50. "Both sexes are aware of more conscious effort in obtaining the gratification of former years, physical, sexual, mental, social and economic." Frustration occurs as duration of life shortens. The senescent recognizes that some change is occurring in him, and may become anxious because of fear that something is radically wrong physically. He may be embarrassed because society considers older individuals as essentially sexless, and any biological urges are thus apt to be misunderstood. Diminution of sensory acuity may result in social isolation and may give rise to suspicion, fear, and anxiety. Physicians are urged to take such factors into account in dealing with the geriatric patient, helping him to talk out his problems (don't preach at him), to maintain a degree of psychological homeostasis, and to help him gain a sense of usefulness.—R. G. Kahlen.

4173. Anastasi, Anne, & Miller, Shirley. (*Fordham U., New York.*) **Adolescent "prestige factors" in relation to scholastic and socio-economic variables.** *J. soc. Psychol.*, 1949, 29, 43-50.—"Two groups each consisting of 50 high school students, equated in sex ratio, age, and grade, but sharply contrasted in academic achievement and socio-economic level, were compared in their expressed preferences for each of 30 characteristics in classmates of their own sex. Although certain consistencies were found in the responses of the two groups, a number of conspicuous differences between the two contrasted groups were noted. These differences between the groups which were differentiated in academic achievement and socio-economic status were on the whole larger than the sex differences found. . . ."—J. C. Franklin.

4174. Antman, Joseph. (*Westchester Jewish Community Services, White Plains, N. Y.*) **Older parent-adult child counseling.** *Jewish soc. Serv. Quart.*, 1949, 25, 334-340.—"The wants of older persons are the wants of all of us" but older people in our changing society are progressively less able to fulfill their

needs. No longer can responsibility be either legitimately or successfully placed on the adult children to provide for the welfare of their aged parents, even when they try to assume it. Planning for the aged must be done with them, must not overlook their capacities and individuality, and requires recognition of their physical and psychological wants. The case-work agency deals with many personal and family problems which involve the aged and their adult children. Many problems grow out of the burden of the aged upon the young and the community's making displaced persons out of the aged. Even though community resources for the aged are inadequate, best use of them and resolution of family tensions and difficulties arising out of the related conflicting needs of parents and children and their families are an especial responsibility of the family case work agency. The author presents a lengthy example showing how specialized approaches in counseling combined with intelligent use of public services improved family relationships and assured the future of an elderly parent.—J. C. Franklin.

4175. Clow, Hollis E. (New York Hospital, White Plains.), & Allen, Edward B. A study of depressive states in the aging. *Geriatrics*, 1949, 4, 11-17.—A predominantly depressed mood was present in 60% of the 365 patients past the age of 60 who were admitted to the New York Hospital, Westchester Division, during the 10-year period from 1936 to 1946. The proportion varied depending upon classification of the mental disorder as functional or organic, and appeared in the latter group to be related to degree of deterioration present. "The characteristics of depression at various ages are determined in a broad sense by factors associated with the changing nature of adjustment to what may be conflicting drives between self-preservation and race preservation or the sexual instinct. The influence of the resources of the aging individual with regard to social and economic factors is emphasized."—R. G. Kuhlen.

4176. Gardner, L. Pearl. (Spring Grove St. Hosp., Catonsville, Md.) Attitudes and activities of the middle-aged and aged. *Geriatrics*, 1949, 4, 33-50.—193 older people between 60-102 years were interviewed regarding their activities and attitudes. 64% were partially or wholly independent economically; 80% lived with relatives. Health was reported to be good, but half talked about medicines, aches, and pains. Happiness, reported by 90%, bore a strong positive relationship to economic independence. Most felt their disposition had remained the same; however, more than two-thirds felt their worst fault to be irritability and quick temper. 80% showed strong social interests. Two-thirds or more spontaneously remarked that they felt unwanted and in the way. Two-thirds of the reported family criticisms centered mostly about the interference of these old people in family affairs and somewhat about their personal habits. Most popular activities were visiting, reading, and listening to the radio. Most of them indulged in day-dreaming of the past. 62 references.—R. G. Kuhlen.

4177. Ginzberg, Raphael. (New York Med. Coll.) Should the elderly cancer patient be told? *Geriatrics*, 1949, 4, 101-107.—"The problem is primarily a psychological one. The decision what to tell the patient must be made in each case in accordance with psychological and environmental conditions. To adhere rigidly to either a yes or no attitude may result in harmful effects for the patient." Discussion of this issue among different branches of medicine and psychology is advocated.—R. G. Kuhlen.

4178. Pollock, Lewis J. (Northwestern U. Med. Sch., Chicago 11, Ill.) Neurological disorders in later life. *Geriatrics*, 1949, 4, 108-112.—"Many neurological disorders may be found in the later part of life; few are peculiar to it. Arteriosclerotic changes are prevalent but not necessarily an evidence of old age of the nervous system. The probability is that the process of growing old, if not subjected to the burdens of preceding diseases, as well as to stresses of over indulgence and of neglect, would in the nervous system, be reflected by a gradual diminution in energy of all its parts, and a similarly gradual decrease in its various functions." Various neurological disorders commonly encountered among the aged are discussed.—R. G. Kuhlen.

4179. Révész, G. L'age et le talent. (Age and talent.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 382-390.—From a consideration of the life histories of great names in music, literature, science, and philosophy, the author discusses the development of creative ability during youth and the course of productive ability with advanced age. He sees no reason to regard old age as an inevitable period of decline and points out that the period of greatest productivity occurred after these people were sixty.—R. K. Meister.

4180. Terman, L. Factors in the adult achievement of gifted men. In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 371-381.—The author reports a follow-up study of his group of gifted children. This group consisted of over 1400 children whose mean IQ was 151 and whose mean age at the time of initial study was approximately 11 years. At the time of the present study, the mean age was 35 years. The purpose of this study was to learn how such gifted children turn out. Of 800 men available, 3 psychologists selected the 150 men who had been most successful and the 150 who had been least successful. Criterion of success was "the extent to which the subject had made use of his superior intellectual ability." These 2 groups were then compared on more than 200 variables, including many kinds of ability and character tests, trait ratings, and case history information. Bibliography.—O. Ruffsvold.

4181. Turner, Henry H. (U. Oklahoma Sch. Med., Oklahoma City.) The endocrine aspects of gerontology. *Geriatrics*, 1949, 4, 74-78.—After an examination of the recognized actions of hormones in the aging, it is "emphasized that only one outstanding action is available therapeutically, namely, the

protein-anabolic activity of testosterone and other steroids. . . . This function is of real and practical significance, entirely exclusive of the hormonal effects on the target organs of the reproductive system, and . . . is the first example that has appeared of a physiological intercession in the aging process."—R. G. Kuhlen.

[See also abstracts 4053, 4365.]

SOCIAL PSYCHOLOGY

4182. Bunker, Henry Alden. *Narcissus: a psychoanalytic note.* In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 159-162.—The Narcissus myth and related folklore are explained in terms of psychoanalytic theory as an equating of narcissism, or "an excessive accumulation of libido within the ego" with death.—N. H. Pronko.

4183. Carter, Launor, & Nixon, Mary. (U. Rochester, N. Y.) *Ability, perceptual, personality, and interest factors associated with different criteria of leadership.* *J. Psychol.*, 1949, 27, 377-388.—The purpose of this report is to describe the relationship among factors listed in the title. High school boys were used as subjects in a program involving, first, the collecting of measures of the boys' high school leadership performances as rated by supervisors, by fellow students, and as determined by activity records; second, the observation of these subjects working in pairs in three miniature work-task situations; and finally, administration of a seven-hour battery of paper and pencil tests. 16 high school junior and 84 senior men participated. Various degrees of relationship with one or more criteria appeared, and the authors suggest that specific correlates for leadership can be found more from interest measures than from ability scores. Power seeking, money oriented, persuasive, masculine people are often rejected as leaders in expressions of opinion by supervisors and associates, while in actual performance situations they become the leader.—R. W. Husband.

4184. Doll, Edgar A. *The relation of social competence to social adjustment.* *Educ. Rec. Suppl.*, 1948, 77-85.—Social and vocational adjustment involves the biological principle of maturation, the sociological principle of environmental selectivity, and the psychological principle of dynamic motivation. Adjustment is dependent upon the degree and coordination of these 3. Intelligence alone is not sufficient for evaluating adjustment; social competence is of greater importance.—C. M. Louttit.

4185. Dumézil, Georges. *La tripartition indo-européenne.* (Indo-European three-scale ideology.) *Psyché*, 1947, 2, 1348-1356.—The organization of castes in society is traced commencing with the Greeks and Romans. India and Iran to-day are quite similar in religion, mythology and ways of life, and also somewhat in society. The various peoples of Europe, Asia, and Africa are compared in mythology and beliefs, as also in social structure. The gods

are compared in mythology of different countries, and great similarities are found. In some ideology, and even in religion, there is a tendency toward a three-class society, a tripartition of the peoples. However, this three-party system is not found in the Biblical literature, nor was it a custom or practice in all ancient and mediaeval people. Yet this social tripartite tendency has been found in countries too far separated to influence each other, and it may be a psychological development which is difficult to explain.—O. I. Jacobsen.

4186. Feldman, Sander S. *Notes on the "primal horde."* In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 171-193.—"It is the aim of the present paper to contribute to the understanding of Freud's conception of the "primal horde" through psychoanalytic interpretation of two rituals and one game prevalent among male children in conservative Jewry."—N. H. Pronko.

4187. Hartmann, Heinz. *On rational and irrational action.* In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 359-392.—Analytic procedure employs both rational and irrational mechanisms in reconstituting the patient. Rational means are used to mobilize irrational forces so that the ego is strengthened and takes over in its own organization certain functions formerly performed by other structures. This insight suggests a model for the understanding and handling of social phenomena on a larger scale.—N. H. Pronko.

4188. Hastorf, A. H., & Knutson, A. L. (Princeton U., N. J.) *Motivation, perception and attitude change.* *Psychol. Rev.*, 1949, 56, 88-94.—Perception can be considered to be "an active purposive process developed through past experience," with a major unconscious selective aspect. Differences in evaluating a social situation are not solely the function of conscious judgment and interpretation. It is held that "changes in group identifications and status-strivings (acquired purposes) are essential to any relatively lasting attitudinal change. If existing identifications are sufficiently constant and satisfying in terms of ego-strivings for status, lasting changes in attitudes seem improbable. If existing identifications are not satisfying in terms of ego-strivings, however, a person may discard his previous identifications and attendant attitudes, identify himself more or less permanently with some new group or groups, and become personally involved in the purposes of the new group."—R. B. Ammons.

4189. Mardiros, Anthony M. (U. Alberta, Sask., Can.) *Ethics as philosophy rather than psychology.* *Canad. J. Psychol.*, 1949, 3, 38-43.—Arguments are offered against the statements of Barnett Savery (see 23: 2011) that ethics should be approached from psychology rather than philosophy.—J. W. Bowles, Jr.

4190. Masson-Oursel, Paul. *La sociologie de Durkheim et la psychanalyse.* (Durkheim's sociology and psychoanalysis.) *Psyché*, 1947, 2, 1439-1442.—The author presents the disagreement and conflict of Durkheim's philosophy with psycho-

analytical procedures and findings. Durkheim upholds the religious angle and morals, more or less ignoring the factor of sex, whereas psychoanalysis stresses the latter, and the selfish drive of the subconscious, which may supercede moral beliefs and even religious teachings. The example of Hitler is given, where morals and religion were certainly ignored. Other philosophers' and psychoanalysts' beliefs are presented, in which the author aims to show the present-day trends which are away from mere acceptance without questioning the same.—*O. I. Jacobsen.*

4191. Róheim, Géza. *Psychoanalysis and anthropology.* In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 9-33.—The steps in the evolution of a rapprochement between anthropology and psychoanalysis are reviewed with reference to the work of various field workers and analysts.—*N. H. Pronko.*

4192. Róheim, Géza. [Ed.] *Psychoanalysis and the social sciences.* New York: International Universities Press, 1947. 427 p. \$7.50.—"This annual presents the psychoanalytic point of view on all subjects ranging from anthropology to sociology." The introduction gives the editor's view regarding the relationship between psychoanalysis and anthropology. Part one: Anthropology, includes 3 papers describing field work in this area. The following sections include individual papers under these headings: mythology, religion, literature, history, and sociology. The papers are separately abstracted.—*N. H. Pronko.*

4193. Salzy, Pierre. *Liberté psychologique et vie collective.* (Psychological freedom and collective living.) *Psyché*, 1947, 2, 1414-1422.—The difference in human relations as brought about by the tendency of city or congested living is described and compared to that of former times. This is a philosophical presentation of aims of "authentic living" and reality. The uniqueness of our present-day mode of life is a force influencing personal relationships and independence as also dependence. The search for truth and for reality should shed light on the conquest of the most modern forms of liberty.—*O. I. Jacobsen.*

4194. Tchakhotine, Serge. *Le voile psychique des masses, fléau de notre temps.* (Psychic assault of peoples— scourge of our times.) *Psyché*, 1947, 2, 1432-1438.—During the war, the typical mind was a hodge-podge of confusion, anxiety, and fear, yet there was also hope and optimism present to some degree. These resulting conditions were due to heredity, to normal instincts and reflexes, and to other circumstances such as the atomic bomb and propaganda from many various angles. Economic, social, and scientific forces were used in propaganda by the Nazi in Germany and the occupied countries, in the guise of culture and education, and results were actually achieved by fear, which was frequently manifested by a pretentious enthusiasm for Hitler and his ambitions and aims.—*O. I. Jacobsen.*

4195. Zipf, George Kingsley. (Harvard U., Cambridge, Mass.) *The hypothesis of the 'Minimum*

Equation' as a unifying social principle: with attempted synthesis. *Amer. sociol. Rev.*, 1947, 12, 627-650.—"In the present paper we have outlined our Hypothesis of the Minimum Equation according to which the sum of the products of all masses moved, when multiplied by their 'work-distances' (as defined) will be a minimum. Furthermore we have elaborated our hypothesis in terms of an analogue in which certain assumptions were made. On the basis of this analogue we deduced some equations about the number, relative sizes, and spacings of the communities, as well as about the number and diversity of their manufacturing, distributing, and other activity, including the number and lengths of trips and other movements within the system. These equations were confirmed empirically by a wide range of data from the United States for the period about 1940.—*H. H. Nowlis.*

METHODS & MEASUREMENTS

4196. Ellis, Albert. *Questionnaire versus interview methods in the study of human love relationships.* *Amer. sociol. Rev.*, 1947, 12, 541-553.—Results of free, non-categorized interviews with 69 undergraduate women, as categorized independently by 3 judges, were compared with records of "anonymous" questionnaires checked by the same subjects one year later. 60 categorized questions and 60 analogous interview items were rated by 4 judges as most, less, or least ego-involving. Results indicate that "the great majority of the subjects gave less favorable, or what may be called more incriminating, responses to the questionnaire than they did to the interview." It is concluded that, for the purpose of this study, the questionnaire is as satisfactory as the interview and for more ego-involving questions it may produce more self-revelatory data.—*H. H. Nowlis.*

4197. Jennings, Helen Hall. *Sociometry in group relations; a work guide for teachers.* Washington, D. C.: American Council on Education, 1948. ix, 85 p. \$1.25.—Between 1945 and 1948 the American Council on Education conducted cooperative school experiments using sociometric techniques. The objective in using them in the schools was to evaluate sociometry as a method of "over-all assessment of group structure to reveal its dynamics and to provide thereby tangible clues both for shaping groups to the greatest psychological advantage of the participants and for enhancing learning in group situation." The results indicated that sociometric devices were useful and had positive applications in "diagnosing interpersonal relationships in school groups." 37 selected references to sociometric studies.—*J. C. Franklin.*

4198. Lorimer, Frank. (American U., Washington, D. C.) *The differentiation of logical levels in social inquiry.* *Amer. sociol. Rev.*, 1947, 12, 507-514.—4 levels of discourse involving scientific inquiry are differentiated: science, technical judgments, general theories, and policy designs. These are defined, and the thesis is proposed that activities on these various logical levels must be differentiated at all times and

that, if they are clearly differentiated, contributions on the different levels can be and properly are complementary. "Their relation to one another is not accidental but intrinsic. Simultaneous complementary advance on all these levels opens to modern man the most promising path to wisdom as the guide of life."—H. H. Nowlis.

4199. Norman, Ralph D. (Princeton U., N. J.) A review of some problems related to the mail questionnaire technique. *Educ. psychol. Measmt.*, 1948, 8, 235-247.—The article surveys recent literature concerning the use of the mail questionnaire. Investigations are reviewed which bear on the relationship between percentage of return to a mail questionnaire and such factors as follow-up questionnaires, use of rewards, form and length of the questionnaire, knowledge concerning sender, and time of issuance of the questionnaire. Practically all studies agree in the finding that there are marked differences in the characteristics of individuals who reply and those who fail to reply to a questionnaire. Late respondents probably also differ from early respondents.—E. Raskin.

4200. Riley, John W., Jr. (Rutgers U., New Brunswick, N. J.) Opinion research in liberated Normandy. *Amer. sociol. Rev.*, 1947, 12, 698-703.—Using local French interviewers directed by survey officers attached to the Psychological Warfare Division of SHAEF, over 1,000 personal interviews with representative samples of the population of the Contentin Peninsula were obtained, beginning 30 days after D-day, with a view to determining local reaction to the landing and presence of Allied troops. Operational sampling problems met with are discussed and results of the survey are summarized. H. H. Nowlis.

4201. Sartain, A. Q., & Bell, Harold V., Jr. (Southern Methodist U., Dallas, Texas.) An evaluation of the Bogardus Scale of Social Distance by the method of equal-appearing intervals. *J. soc. Psychol.*, 1949, 29, 85-91.—The 7 statements of the Bogardus Scale were included among 100 generalized statements regarding racial and national groups scale-judged by 250 college students. It was found that items of the Bogardus scale were unbalanced in number favorable and unfavorable, and that they were unequally spaced in scale value. A Revised Bogardus Scale was, therefore, constructed, and 2 Thurstone-type scales of 20 items each assembled. These 4 scales were administered to 100 college students to measure their attitudes toward the English, Japanese, and Negroes. The results showed high agreement between the Bogardus and Revised Bogardus Scales in test scores but only fair agreement between each of these and each of the 2 Thurstone-type scales which themselves showed only moderate correlation.—J. C. Franklin.

4202. Skubic, Elvera. (Louisiana State U., Baton Rouge.) A study in acquaintanceship and social status in physical education classes. *Res. Quart. Amer. Ass. Hlth.*, 1949, 20, 80-87.—The role of certain aspects of acquaintance and social status

in physical education is the basis of the present study. 326 freshmen and sophomore women enrolled in physical education classes at the University of California at Los Angeles served as the subjects. Individual, team, and rhythmic-type activities are included. On the acquaintance test each subject indicated the names of persons in her class with whom she was familiar. The number of students on this list was "an indication of her acquaintance volume." An indication of the expansiveness of an individual was obtained by comparing the first list with a second secured 6 weeks later and rating the extent of increase in the numbers listed. An adaptation of Moreno's sociometric test was used for ascertaining social status. Skubic reports a "definite relationship between the number of class mates a girl knows and the number who know her." She further states, "the number of social isolates decreases as the members of the group become better acquainted." Emphasis is placed upon the fact that social status can be improved by improving human relations through better guidance in the development of social attitudes. 32 references.—M. A. Seidenfeld.

CULTURES & CULTURAL RELATIONS

4203. Alexander, Leo. (Boston (Mass.) State Hosp.) Destructive and self-destructive trends in criminalized society. *J. crim. Law Criminol.*, 1949, 39, 553-564.—The eruption of the aggressive-destructive urge which the author calls thanatolatri or "idolatrous delight in death" was seen to have its awakening in the activity of the SS as a means of psychological defense with the idea of "hardening" the men. These drives, ultimately, by the law of psychology, turned also against associates and finally against the self. Examples of this are seen in the murderous relationships which broke out among the rank of the SS. This study of totalitarianism further reveals how the destructive principle caused the destruction of the morals, institutions, ideals and structure of the German family and town while claiming to want the opposite.—V. M. Stark.

4204. Bollnow, Otto Friedrich. Vorurteile. (Prejudices.) *Sammlung*, 1949, 4, 74-81.—This is a theoretical treatise about prejudice. To be without prejudices is indispensable in order to be genuine and true. We have to learn to be free of prejudices. A prejudice is always the prejudice of a certain social group, and is a negative evaluation of another group. It is characterized by an obstinate resistance toward change, and develops through conflicts as an unconscious mechanism.—C. Bondy.

4205. Bunker, Henry Alden. The Bouphonia, or ox-murder: a footnote to Totem and Taboo. In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 165-169.—The totem feast, celebrated by the clan which annually devoured, then mourned over, the otherwise revered totem animal, is believed to be better authenticated since the discovery of a document describing a rite carried out annually at Athens as late as the fifth century B.C.

and which may date back to about 1500-2000 B.C. This act is a "mimetic representation" and repetition of the primordial one in which the expelled sons joined forces, returned, slew and ate their father. Aetiological myths concerning the Bouphonia throw additional light on the meaning of this act.—*N. H. Pronko.*

4206. Griaule, Marcel. *Descente du troisième verbe chez les Dogons du Sudan.* (Myths among the Dogons of Sudan.) *Psyché*, 1947, 2, 1333-1347.—This is a detailed presentation of myths of the natives who live along the Niger river. It shows similarities to the myths of the Mediterranean areas, and also of Egypt, Ethiopia, and Arabia. The stories include personification of animals, and also interpret the life of the people. The author states that here is a fruitful field for psychoanalytical study and research. The myths assume a religious character, and morals are often found, although not always plainly stated. The heavens are mentioned frequently, and there is great use of symbolization through the myths.—*O. I. Jacobsen.*

4207. Kramer, Bernard M. (4901 S. Ellis Ave., Chicago 15, Ill.) *Dimensions of prejudice.* *J. Psychol.*, 1949, 27, 389-451.—The extreme complexity of prejudice has stood in the way of solving many problems both of theory and of practice. The author seeks to state precisely what is being measured in the field of prejudice. Past research has generally attempted to measure direction and degree of prejudice. Lately it has become recognized as a very complex phenomenon, not a single unitary trait in any given case, such as feeling toward a minority group. The author then lists dimensions under the headings of cognitive, emotional, and action orientation. Type of question makes wide differences in response, as asking impersonally versus citing a specific group whether a group has too much power. There are 48 pages of items that have been used in past surveys, to measure prejudice, classified into a number of groups. 85 references.—*R. W. Husband.*

4208. Loewenstein, Rudolph M. *The historical and cultural roots of anti-Semitism.* In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 313-356.—Distrustful of Freud's hypotheses regarding the hereditary transmission of memories of the remote past and of the parallel between the development of an individual and that of humanity, a psychoanalytic orientation without these assumptions is employed in an attempt to understand the basis of anti-Semitism.—*N. H. Pronko.*

4209. Mannoni, O. *Le complexe de dépendance et la structure de la personnalité.* (The dependence complex and the personality structure.) *Psyché*, 1947, 2, 1453-1479.—The inferiority complex of members of the colored race living in Europe is explained as having specific social and psychological roots, and causes go back into history and tradition. Inferiority, however, is a rarity in the Malgache tribe. Primitive mentality must be understood in order to understand the absence of inferiority among

such peoples. Inferiority is almost a characteristic of European peoples. It is further explainable through psychoanalysis, as a sort of immature emotionality, which persists and is accepted and even nurtured. Detailed comparisons of attitudes of primitive and civilized traditions in such conditions as death in the family, analysis of dreams showing inferiority complexes, and childhood training are presented. Independence and liberty are achieved only when inferiority shackles are overcome, similar to colonial peoples achieving their freedom from a dominating ruler-country.—*O. I. Jacobsen.*

4210. Morris, James Russell. *The social-economic background of negro youth in California.* In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 322-326.—(Stanford Univ. Bull., 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1947.

4211. Mundy, Paul. (Catholic U., Washington, D. C.) *The young Negro worker in Washington.* *D. C. J. Negro Educ.*, 1949, 18, 104-113.—An examination was made of 2,897 work permits issued to Negro boys by the Washington, D. C. school system during September 1945 and April 1947, and an additional number issued to white boys. All were within the age range of 15 to 17 years. Work permits were issued only after jobs were secured. Messenger, helper, porter, bus-boy, dish-washer, and stock-boy accounted for 90% of the Negro employment. While white boys also filled these positions, the ratio is considerably lower than for Negroes, and the former had almost a monopoly on clerk, usher, stuffer, sales, and other desirable positions. The schools are apparently not doing an effective job of vocational placement insofar as the Negro boy is concerned.—*A. Burton.*

4212. Perrotti, Nicola. *Problèmes psychologique du peuple italien.* (Psychological problems of the Italian people.) *Psyché*, 1947, 2, 1423-1431.—The psychological problems of the Italian people are given as four-fold: (1) those conditions caused by the war (a) fear of death by aerial bombardment, (b) property destruction, (c) disorganization of the nation, (d) famine and disease, and (e) oppression by Facists in running the country; (2) psychological reaction to war events, such as individualism, return to normal life, adjustment to reality of war's aftermath, and to defeat in the war; (3) collective war neuroses of the population with loss of morale; (4) reaction to these neuroses conditions, both social and political, persistence of ways of life, attempts at self-government and its responsibilities and the many economic problems. Although there exists what has been termed therapy of spirit and harmony among the people, there are still the many problems mentioned which must be resolved.—*O. I. Jacobsen.*

4213. Róheim, Géza. *Dream analysis and field work in anthropology.* In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 87-130.—A series of dreams for each of two subjects living in a matrilineal and matrilocal society is reported with corresponding associations and interpretations.

The dreams are interpreted to show presence of an oedipus complex, nevertheless.—*N. H. Pronko.*

4214. Sartre, Jean-Paul. *Anti-Semite and Jew.* New York: Schocken Books, 1948. 153 p. \$2.75.—The anti-Semite does not fear Jews but himself and the world. He is basically a coward. Because he refuses to accept Jews, assimilation is thwarted. There are two reactions to this hostility. The authentic Jew chooses himself as a Jew. The inauthentic tries to escape Jewishness through the universality of rationalism. Neither of these is a solution. Anti-Semitism must be suppressed, but education and propaganda are not enough unless a classless society is achieved. Gentiles must form militant leagues against anti-Semitism. "The cause of the Jews would be half won if only their friends brought to their defense a little of the passion and the perseverance their enemies use to bring them down."—*G. K. Morlan.*

4215. Spitzer, Hermann M. *Psychoanalytic approaches to the Japanese character.* In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 131-156.—Various aspects of Japanese life are related to, and interpreted in terms of psychoanalytic thinking.—*N. H. Pronko.*

4216. Stagner, Ross (*U. Illinois, Urbana.*), & Britton, R. H., Jr. *The conditioning technique applied to a public opinion problem.* *J. soc. Psychol.*, 1949, 29, 103-111.—"Qualitative judgments of nationalities (Bolivian, Columbian) were significantly affected by an experiment in which an unpleasant feeling-tone was conditioned to the name of the nation. Students conditioned to one of these nations reacted negatively to both. Those students who learned most efficiently in the conditioning sequence became significantly less friendly in their opinions of Bolivians and Columbians; those who learned with low efficiency showed a trend comparable to that of the control group, toward friendliness with these nationalities. The experiment is interpreted as indicating that experiences of the conditioned-response type can be effective determinants of public opinion where specific information is low and judgment is based on the effective tone of the stereotyped label."—*J. C. Franklin.*

4217. Sterba, Richard. *Some psychological factors in Negro race hatred and in anti-Negro riots.* In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 411-427.—With material gathered from patients particularly during the Negro race riots in Detroit during June of 1943, the thesis is developed that there is a dual basis for the anti-Negro attitudes of white people. (1) Negroes represent younger siblings in the unconscious of such people. (2) Hunting and Negro riots have the same unconscious origin in patricidal impulses in that "both represent repetitions of father murder as it occurred among archaic tribes."—*N. H. Pronko.*

4218. Stumpf, Florence, & Cozens, Frederick W. (*U. California, Berkeley.*) *Some aspects of the role of games, sports, and recreational activities in the*

culture of modern primitive peoples. II. *The Fijians.* *Res. Quart. Amer. Ass. Hlth.*, 1949, 20, 2-20.—Synthesizing the description of missionaries, traders and others, the authors have attempted to reconstruct the recreational and sports activities of Fijians in an effort to examine them as integral parts of culture contact and change. As a result of this study the authors conclude that, "There is ample evidence that the culture element which we have identified as sports, games and recreational activities played a vital and indispensable role in maintaining equilibrium in pre-white Fijian society." Several suggestions on the implications of their findings for their profession are made. 28 references.—*M. A. Seidenfeld.*

4219. Tenenbaum, Benjamin. [Ed.] *Ehad me-ir ushnayim mimishpaha.* (One of a city and two of a family.) Merhavia: Sifriat Poalim, 1947. 242 p.—A selection of 70 from among 1000 autobiographies, that the editor had gathered among Jewish children-refugees from Poland. The book contains the following subject-matters: Warsaw, Vilna, ghettos, concentration camps, in the villages and forests, partisans. The life-histories had been written in several languages, most of them in Yiddish or Polish, and they were translated into Hebrew. There is very important raw material for psychological and sociological research.—*H. Ormian.*

4220. Thon, H. H. *Sh'loshim mishpahot maarayot ba-ir haatika shel yerushalayim.* (Thirty Moroccan families in the Old City of Jerusalem.) *L'maan hayeled v'hanoar*, 1948, No. 33. 55 p.—A sampling of 30 Jewish families through 3 generations of the Moroccan community was investigated in the Jewish quarter of the Old City in Jerusalem. The adjustment to the Palestinian conditions had begun with the first generation, but that was rather a maladjustment (family life, culture, occupations, education). The maladjustment increased during the second generation (especially health and education), and decreased again in the third generation, i.e., children born and educated in this country. Their health is in much better state, their education is fuller and not exclusively religious, even more occupational, some of them became members of "youth-movements" or of communal settlements, the neglect among them decreased, and the age of marriage is rising. The most important causes of these changes are clubs, schools, youth-leaders, and occupational training.—*H. Ormian.*

4221. White, Leslie A. (*U. Mich., Ann Arbor.*) *Culturological vs. psychological interpretations of human behavior.* *Amer. sociol. Rev.*, 1947, 12, 686-698.—Any given specimen of human behavior is made up of the organism on one hand and the cultural tradition into which the organism is born on the other hand. In a consideration of the differences of behavior between peoples we may regard man as a constant and culture as a variable. Examples of human behavior that are to be viewed culturologically rather than psychologically—the mother-in-law taboo, incest, clans, political or social change, war—

are discussed. A science of culturology is broadly outlined. "Psychology and culturology deal . . . with biological and extra-somatic aspects respectively of one and the same set of events. Both sciences are essential to a comprehensive interpretation of behavior. It is necessary, however, in order to avoid confusion, to know and respect the proper boundaries of each."—H. H. Nowlis.

[See also abstracts 4405, 4414.]

SOCIAL INSTITUTIONS

4222. Baudouin, Charles. Signification des fêtes. (Meaning of ceremonies.) *Psyché*, 1947, 2, 1291-1308.—Religion has become highly social, and communion has achieved a place of highest social significance. The various ceremonies are explained as to their psychological importance and meanings. The contagious feeling and spirit of Christmas is cited as an influence which is social and also effects the mental attitudes. Easter is also mentioned similarly. Many examples are included from Biblical literature, as means of explaining faith and worship. Rich associations, imagination in ritualistic ceremony, and words such as "in spirit and in truth" are explained, in which religious experiences are identifying one's self with God, in the strength of unity of belief with others, and, in the feelings of security in a future life.—O. I. Jacobsen.

4223. Biernaert, Louis. Le rôle affectif de la Vierge-Mère dans le catholicisme. (The affective role of the Virgin Mother in Catholicism.) *Psyché*, 1947, 2, 1309-1318.—The author explains the place of the Virgin Mary in the catholic religion. She is the perfection of womanhood and of motherhood, in the church home. She represents the ideal to the imagination and to adolescents—the immaculate conception of virginity and the consecration of charity. All desirable and perfect qualities of womankind are represented in the Virgin Mary. Motherhood has assumed a new and sublime meaning, nowhere to be duplicated in history or literature. The author states also that psychology and psychoanalysis can be observed in this role of motherhood which has lasted through the ages.—O. I. Jacobsen.

4224. Damrin, Dora E. (U. Illinois, Urbana.) Family size and sibling age, sex, and position as related to certain aspects of adjustment. *J. soc. Psychol.*, 1949, 29, 93-102.—Family size, family position, sibling sex, and sibling age effects on the home, social, emotional adjustment, intelligence, and school achievement of 156 high school girls were studied. Analysis of the data showed a slight negative (statistically non-significant) relationship between family size and superior standing in all of the categories. The only statistically reliable finding was the negative relationship between family size and intelligence. The author concluded, therefore, that the effects of these variables on the aspects of adjustment studied were "to all practical purposes

so slight as to be considered negligible."—J. C. Franklin.

4225. Harding, T. Swann. The place of science in democratic government. *Amer. sociol. Rev.*, 1947, 12, 621-627.—Science is peculiarly adapted to work well with government in a democracy for democracy is a scientifically experimental method of government and democracy at its best uses scientific method. "A democracy uses science in the formulation of policy. Dictatorship uses scientific means of enforcing preconceived opinions and of acquiring power over others. Science strengthens and broadens democracy; it merely renders dictatorship more arbitrarily ruthless. Scientific personnel must achieve its rightful status within this our own democratic government."—H. H. Nowlis.

4226. Hitschmann, Edward. New varieties of religious experience: from William James to Sigmund Freud. In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 195-233.—A series of biographical studies of historical personages are presented to show how the ubiquitous oedipus complex accounts for the unconscious roots of the varieties of religious attitudes. 43 references.—N. H. Pronko.

4227. Kay, Lillian Wald, & Gitlin, Irving J. (New York U.) Atomic energy or the atomic bomb: a problem in the development of morale and opinion. *J. soc. Psychol.*, 1949, 29, 57-84.—The questions asked and answers received by public opinion pollers clearly show that people are atomic bomb rather than atomic energy oriented. In this study the aim was to isolate factors influencing opinion on atomic developments. The relationships between group membership and beliefs and opinions on atomic issues were selected for intensive inquiry. A questionnaire dealing with science, politics, current events, the atomic bomb and atomic energy, and requiring estimates of expected national vs. own opinions and items of personal data was administered to 8 widely differing groups. Significant differences between groups were found but most differences were obtained when analysis was made according to political frame of reference, educational status, level of interest in current events, fund of information, etc. A related study in changing opinion on atomic issues was conducted in which the high and low changers were identified and described. From their findings the authors concluded: (1) "The advice of the people who are best informed technically is being ignored." (2) Efforts being expended to create a new atomic energy vs. atomic bomb public frame of reference are ineffective. (3) Group differences in opinion are related to information selected on the basis of "existing [and inadequate] frames of reference."—J. C. Franklin.

4228. Lorand, Sandor. The anathema of the dead mother. In Roheim, G., *Psychoanalysis and the social sciences*, (see 23: 4192), 235-244.—A strange religious rite of a Czech-Jewish community is analyzed from a psychoanalytic viewpoint and interpreted as a defense against the breaking through

of various anti-social tendencies that represent unconscious drives transformed into a religious ceremony and kept under control by religion itself.—*N. H. Pronko.*

4229. Nottingham, Elizabeth K. (*Queens Coll., New York.*) Toward an analysis of the effects of two world wars on the role and status of middle-class women in the English-speaking world. *Amer. sociol. Rev.*, 1947, 12, 666-675.—The effects of World War I, the Interim Depression Period, and World War II on the four main roles of middle class women (family members, sexual partners, members of vocational groups, and members of community and political organizations) are discussed in terms of Parson's universalistic and particularistic frames of reference. A tentative forecast of the total feminine role in the immediate future is presented. It is concluded that war is one factor responsible for the jerky and poorly articulated development of the feminine role in our culture but that wars have merely served to accelerate trends already in operation. "A more peaceful era might perhaps provide a milieu in which the roles of women might be more clearly defined, better understood and more stable.—*H. H. Nowlis.*

4230. Ramnoux, Clémence. La rivalité du père et du fils dans la légende irlandaise. (Rivalry of father and son in Irish legends.) *Psyché*, 1947, 2, 1357-1373.—Early Irish legends are reviewed in which rivalry existed between father and son. This rivalry extended to the royal families also. Psychological explanations are given, such as frustration, tensions, jealousies, persecution complexes, and other situations. Various myths bring out this same situation, and numerous examples are cited.—*O. I. Jacobsen.*

4231. Rohmer, Leonard. (*Jewish Family Serv., New York.*) The problem of the basic maintenance in the family agency. *Jewish soc. Serv. Quart.*, 1949, 25, 319-324.—Meeting the basic financial need of the family is the responsibility of the public agency. What financial assistance, if any, should the private family agency provide? The author discusses the dilemma posed by the limited resources of the private agency to do a case work job, the insufficiency of public agency maintenance support, and the case work client in need of funds. In many cases the value of case work is endangered by the difficulty clients have in understanding and accepting the agency's inability to give them financial assistance. In the author's judgment such assistance should not be offered on the basis of assessing simple immediate financial need but is better determined by how much limited financial help will enable the clients and clients' families "to bring about a change in their situation—to work toward achieving a 'more stable and independent way of living'."—*J. C. Franklin.*

4232. Servadio, Emilio. La fée dans l'enfance et dans le mythe. (The fairy in infancy and in myth.) *Psyché*, 1947, 2, 1319-1332.—In imagination, and in legends and fables, there is a figure which, in various countries, is most similar. She is a fairy, often the

ideal of imagination. She is found in escapism in psychology. She is perfection in dress, in figure, and in appearance, yet she is not of reality, but of a strange and imaginative world. She is created in fantasy of infancy and of adulthood, because of projection of the ideal which cannot be attained in reality. Association is influential, and to children, she is the ideal who is mother. She appears in dreams also, which indicates the working of the subconscious in psychoanalysis. Although adults and children state that they do not believe in fairies, they still cling to them in fantasy, largely because of the mother fixation.—*O. I. Jacobsen.*

4233. Winch, Robert F. (*Northwestern U., Evanston, Ill.*) The relation between the loss of a parent and progress in courtship. *J. soc. Psychol.*, 1949, 29, 51-56.—The following proposition was tested: "If the parent of the same sex as the offspring is missing from the home and is not replaced by a step-parent, on the average the offspring will tend to show less advancement in heterosexual adjustment than those whose homes are unbroken." The nature of the courtship behavior in terms of 8 degree-steps was determined from questionnaire reports made by 495 men and 566 women, native born, non-Jewish, middlewestern college students. Courtship status was related to the family situation, "motherless," "fatherless," or parentally intact. Low male courtship level of behavior (as compared with high) was found to be significantly associated with absence of the father from the home. The author interpreted the absence of any significant relationship between presence or absence of parents in home and female level of courtship behavior, "as a measure of confirmation of the Freudian thesis that a female's love pattern follows a course which is less well-defined than that of the male."—*J. C. Franklin.*

[See also abstract 4105.]

LANGUAGE & COMMUNICATION

4234. Hess, M. Whitcomb. The semantic question. *New Scholast.*, 1949, 23, 186-206.—Modern semanticists raise the question of symbolism in the problem of verbal reference. The earlier subjectivists were concerned with the thought-content of the word and its relation to the object of knowledge. The modern semanticists appear to have shifted interest from the problem of cognition to that of symbolism. It is felt, however, that the shift is not real, but is only a change of accent in the same false cognition theory of ancient time. It is felt that the true answer to the problem of determinateness of meaning can be found only by the character of truth exhibiting itself as 3 aspects; truth of the object, truth of the perceiving mind, and truth of God.—*G. S. Speer.*

4235. Kris, Ernst, & Leites, Nathan. Trends in twentieth century propaganda. In *Roheim, G., Psychoanalysis and the social sciences*, (see 23: 4192), 393-409.—The place of propaganda in Western civilization is developed in terms of the hypothesis

that "responses to political propaganda in the Western world have considerably changed during the last decades; and that these changes are related to trends in the sociopsychological conditions of life in the twentieth century."—*N. H. Pronko.*

4236. Levesque, René. *Ideographie.* (Idea writing.) *Psyché*, 3, 1948, 347-359.—The expression of ideas through graphic symbols is as old as history. Primitive man did this, the Romans used it to a great extent, and many periods of history are better known because of this tendency. Symbols may have individual meanings, yet there are also some which are accepted almost universally. It is possible to see traces of this in cartooning to-day. There are 12 figures presented to demonstrate such expressions of ideas. In all teaching of mathematics and language, the symbols used are ideograms, which have a psychological significance. Abstract symbolization can still be deeply explored in the fields of education, the sciences, and even in architecture.—*O. I. Jacobsen.*

4237. Ramnoux, Clémence. *Experience sur la transmission des légendes.* (Experiences in transmitting legends.) *Psyché*, 3, 1948, 310-323.—The author tried out an experiment much like the old one of words told, mouth to ear, and passed down a chain, with results of a final set of words very different from the original. The author used an old Irish legend, and his subjects were his own class members, students of adolescent age. He gives seven different types of versions which resulted, and which he analyzed. The theme of the legend was rebellion and conflict between a daughter and her father, and the versions indicate wishful thinking, imagination, inclusion of morals, and a seemingly natural evolution of events, identification, as well as irrational courses.—*O. I. Jacobsen.*

4238. Weiner, Norbert. (*Massachusetts Inst. Tech., Cambridge.*) *Time, communication, and the nervous system.* *Ann. N. Y. Acad. Sci.*, 1948, 50, 197-220.—A fundamental presentation is made of the problems of communication with emphasis on time, communication, and the nervous system. Philosophical and theoretical problems are discussed and examples are selected from several areas.—*S. Ross.*

[See also abstracts 4113, 4262, 4453.]

CLINICAL PSYCHOLOGY, GUIDANCE, COUNSELING

4239. Eisenberg, Sidney S. (*Jewish Family Serv., Philadelphia, Pa.*) *Eligibility as a dynamic in relief service to new Americans.* *Jewish soc. Serv. Quart.*, 1949, 25, 325-330.—The refugee client "may have little or no choice in the coming, the community to which he is sent, or the agency. Nor—and this is equally important—has the agency really chosen to work with him in the way that it does with its usual clientele." The client is likely to have difficulty in accepting the limits of the help the agency can pro-

vide. Resulting disappointment that he is not to be completely taken care of may often times result in fear, hostility, and aggression." Therefore, the agency must combine its casework role with its relief role in helping the client to not only maintain his eligibility for agency financial assistance but also, by so doing, to gradually enable him to become independent and "to meet his problems in his own way."—*J. C. Franklin.*

4240. Siegel, Elisabeth. *Die geistigen und seelischen Voraussetzungen der Arbeit der Sozialtaetigen* (The mental and psychological prerequisites for the work of the social worker). *Sammlung*, 1949, 4, 51-64.—This lecture shows the enormous difficulties that confront German educators and social and welfare workers. More than ever they have the twofold responsibility for the individual and for the social situation. Social work, social action and political activity have to go together. Even if one does not have the belief in political solutions, social and educational help for the neighbor is necessary and important. A change in the attitude toward the people in need is necessary as is a more practical Christianity.—*C. Bondy.*

4241. Stein, Herman D. *Welfare and child care needs of European Jewry.* *Jewish soc. Serv. Quart.*, 1949, 25, 297-307.—This is a report of the Joint Distribution Committee's activities in meeting the needs of European Jews for cash, food, and clothing, care of children in institutions, day nurseries and foster families, care for the aged, and summer camps for children. From VE Day through 1946 efforts were concentrated on meeting the primary needs of the million and a half European Jewish survivors. During 1947 although much direct relief needed to be provided, education, reestablishment of organized family and community life, and arranging resettlement or emigration to Israel assumed importance in the work of the J. D. C. The stabilization of standards, building of local agencies, case work, and meeting the growing and pressing needs of the aged required especial J. D. C. attention during 1948. "Today, thanks to the cooperative efforts of many organizations—local, national and international—and the generous contributions of Jewry in many lands, no Jew in Europe need go hungry or be without shelter, no child need roam the streets, no DP camp is without special supplies to make life more livable."—*J. C. Franklin.*

[See also abstracts 4014, 4174, 4325, 4444.]

METHODOLOGY, TECHNIQUES

4242. Aptekar, Herbert H. (*Jewish Community Services of Queens-Nassau, N. Y.*) *The use of private psychiatrists by a social agency.* *Jewish soc. Serv. Quart.*, 1949, 25, 381-407.—After distinguishing the fields and functions of case work, counseling, and psychiatry, the author describes the growth and integration of private psychiatric treatment as a part of an agency's service. In this teamwork arrangement, the case worker assumes responsibility

"for all that pertains to the family environment and maintains and follows through on contact with those members of the patient's family who are directly affected by the treatment being offered. For the treatment interviews themselves, only the psychiatrist can be responsible. The nature of the treatment, however, is mutually agreed upon—it is, in a very real sense—agency treatment." The problems of agency-psychiatrist relationships are discussed. Two case histories illustrate the nature of the working relationships involved. Discussion by Ruth Fizdale, Fredericka Neumann, Samuel Richard Rosen, and Wilfred C. Hulse.—J. C. Franklin.

4243. Bixler, Ray H. Counseling: eclectic or systematic? *Educ. psychol. Measmt*, 1948, 8, 211-214.—Arguments in favor of a "systematic" as opposed to an "eclectic" point of view in counseling are advanced. Because of the present inadequacy of diagnostic skills, the counselor has no criteria by which he can select the appropriate method of treatment or the technique for any one point in therapy. Nor are there criteria for evaluating the effectiveness of different counseling procedures. The practical difficulty of training counselors to be proficient in using several different therapeutic techniques is also noted. Clinical experience would indicate that it is not the nature of the therapeutic method used but rather the client's personality and the counselor's attitude which determine treatment success.—E. Raskin.

4244. Butler, John M. On the role of directive and non-directive techniques in the counseling process. *Educ. psychol. Measmt*, 1948, 8, 201-207.—The counseling process is viewed as consisting of two phases: the "adjustive" phase in which emphasis is on the personal and emotional problems of the client and the "distributive" phase in which vocational and educational problems are focal. In the "adjustive" phase, non-directive techniques are most appropriate. Their application enables the client to choose new and rational goals and to enter the second or "distributive" phase of counseling. In this phase, counseling techniques can become increasingly directive, since the client is able to make constructive use of authoritative information given by the counselor, evaluation of test scores, presentation of possible alternatives, etc. The term "directive techniques" should not connote giving suggestions and "slanted" information based on counselor-selected goals, which is characterized as "bad counseling in any context." 16 references.—E. Raskin.

4245. Hardee, Melvane Draheim, & Bernauer, Margaret. (Florida State U., Tallahassee.) A method of evaluating group discussion. *Occupations*, 1948, 27, 90-94.—Counselors' self-ratings and students' ratings of counselors on twelve techniques are compared. Counselors' ratings tended to be lower than students' ratings, and with greater variation. There is little agreement between students and counselors on best techniques, and slight agreement on weakest points of technique. It is felt that the use of the check list produced a motivation for

self-development that had value for the counselors.—G. S. Speer.

4246. Montalta, E. Psychologie und Erziehung. (Psychology and education.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 488-512.—A brief account of clinical psychological work in connection with schools in Switzerland, with special emphasis on Catholic schools. References.—M. L. Reymert.

4247. Myers, George E. (U. Michigan, Ann Arbor.) Follow-up: the step-child of the guidance family. *Occupations*, 1948, 27, 100-103.—Only feeble efforts have been made to render follow-up services as part of the guidance program, although numerous follow-up studies have been made. The need for follow-up services is indicated.—G. S. Speer.

4248. Powell, Margaret G. Comparisons of self-rating, peer-ratings, and expert's-ratings of personality adjustment. *Educ. psychol. Measmt*, 1948, 8, 225-234.—This study investigates the relationship between an individual's own statements about his adjustment and the judgments made by peers and experts. 140 women college students who took the neurotic tendency and sociability scales of the Bernreuter Personality Inventory were rated by dormitory counselors who knew them for their degree of adjustment on a 7-trait rating scale. "Peer" ratings for these students were obtained on a Guess-Who and Sociometric test from their fellow students living on the same dormitory corridor. Median correlations between students' self-ratings and ratings by the counselors and peers were very low positive. An analysis of extreme cases also showed little agreement between "self-insight" into adjustment and ratings by others. The findings suggest that, on the basis of self-diagnosis, those in need of treatment are not often identified and that "self-insight" cannot be the sole method of selection for therapy.—E. Raskin.

4249. Roeber, Edward C. (U. Missouri, Columbia.) A meaningful record of tests. *Educ. psychol. Measmt*, 1948, 8, 397-400.—The following information should be given in recording test scores on cumulative records and report forms, if serious misinterpretation of test scores is to be avoided: complete name of test; level and form; raw score; percentile rank, standard score, etc.; norm-group; probable error of test; test administrator; date of test administration; and unusual test administration conditions.—E. Raskin.

4250. Weinheimer, Herman. (Jewish Community Service Soc., Buffalo, N. Y.) Staff participation in a community relations program. *Jewish soc. Serv. Quart.*, 1949, 25, 341-348.—The author examines the typical promotional activities of social work agencies in their approach to public relations. He concludes that effective community support for case work services and agencies requires not advertising but a two-way communications process in which the community and agency identify with each other. Social workers therefore "must orient" themselves "to

acceptance of the community's active partnership in the community relations process."—J. C. Franklin.

4251. Williamson, E. G. (U. Minnesota, Minneapolis.) Supervision of counseling services. *Educ. psychol. Measmt.* 1948, 8, 297-311.—The 3 major goals in the supervision of counseling services are: improving the quality of counseling, developing counselors, and controlling quality. (The latter goal is achieved by giving professionally trained counselors maximum opportunity to exercise their judgment and imagination rather than through the use of procedural manuals.) Consultations with the supervisor, case readings, case conferences, and evaluation by an "outsider" are discussed as methods for the evaluation and supervision of counseling work. 6 criteria for differentiating "good" and "bad" counseling are suggested and described in detail.—E. Raskin.

[See also abstracts 4136, 4276, 4382.]

DIAGNOSIS & EVALUATION

4252. Cofer, C. N., Chance, June, & Judson, A. J. (U. Maryland, College Park.) A study of malingering on the Minnesota Multiphasic Personality Inventory. *J. Psychol.*, 1949, 27, 491-499.—Falsification on personality inventories has often been advanced as a serious source of invalidity of these instruments. Two methods have been used to control this: hide the test's purpose, or include some measure of the subject's honesty. In this experiment 3 groups of college sophomores were used: control; those instructed to fake the MMPI test to make the best impression possible (positive malingerers), and negative malingerers, i.e., to answer as they thought an emotionally disturbed individual would. Each group took the test honestly and then under instructions, or in reverse order, thus controlling order of taking. "F" scores were found to be useful in detection of negative malingering, and an additive combination of "L" and "K" was useful for the detection of positive malingering. Item analysis revealed that certain items were highly susceptible to positive malingering but insusceptible to negative malingering. Susceptibility of an item to malingering bore some relation to its subtlety or obviousness.—R. W. Husband.

4253. Cofer, Charles N., Judson, A. J., & Weick, D. V. (U. Maryland, College Park.) On the significance of the psychogalvanic response as an indicator of reaction to personality test items. *J. Psychol.*, 1949, 27, 347-354.—Malingering on paper and pencil personality tests is an important obstacle to their significant employment as screening devices in military settings. Physiological methods might be used to detect such malingering. Psychogalvanic response, Tarchanoff effect, was used in this study to test 25 male sophomore S's while taking the Minnesota Multiphasic Personality Inventory. Later interview was held to discuss some of the items on which the subject had shown large deflections. Neither

statistics nor analysis of statements gave significant diagnoses, although in individual cases material of personal significance did appear. Deviation was not always significant of past emotional associations; hence the authors conclude that PGR would not be of much validity in detecting malingering.—R. W. Husband.

4254. da Costa, Maria Irene Leite. (Instituto Costa Ferreira, Lisbon, Portugal.) O labirinto manual de Rey. (Rey's manual maze.) *Criança portug.*, 1947-48, 7, 65-70.—Rey's maze test was administered to 759 individuals, including 705 children and 54 adults. Norms are published for Portuguese children and adults. They closely approximate Rey's tables for Swiss children.—R. J. Corsini.

4255. Guera, A., & Lang, T. El test de Szondi; análisis del destino. (The Szondi test. Fate analysis.) *Rev. Psicol. gen. apl.*, Madrid, 1948, 3, 343-354.—A general description of the Szondi test is presented including the theory underlying the test, the techniques of administration, and the analysis of test results.—A. J. Smith.

4256. Heston, Joseph C. (DePauw U., Greencastle, Ind.) A comparison of four masculinity-femininity scales. *Educ. psychol. Measmt.* 1948, 8, 375-387.—An empirical evaluation is made of the following masculinity-femininity tests: Strong's Vocational Interest Blank for Men, Form M; Kuder Preference Record, Form BM; Minnesota Multiphasic Inventory; and the DePauw Adjustment Inventory. Intercorrelations among the four M-F scales in these tests (which were administered to a group of 34 men and 45 women college students) ranged from .414 between the DePauw with the Kuder and Strong to .726 between the Strong and Kuder. All 4 scales differentiated between male and female subjects, the MMPI being most effective in this respect.—E. Raskin.

4257. Holt, Robert R. (Menninger Foundation, Topeka, Kans.) Principal references. *TAT Newsletter*, 1949, 2(3), Suppl., 14 p.—This 232-item bibliography of papers on the "Thematic Apperception Test" is believed to be the most complete and accurate available and should be comprehensive in its coverage up to 1949.—C. M. Louttit.

4258. Rimoldi, H. J. A. (U. Chicago, Ill.) A note on Raven's Progressive Matrices Test. *Educ. psychol. Measmt.* 1948, 8, 347-352.—Raven's "Progressive Matrices" is a non-language test of intelligence (published in England) which is suitable for use with individuals above 6 years of age. The test consists of 60 "visual pattern" type of items which increase progressively in difficulty. It can be administered to individuals with different kinds of physical handicap, and there is a special form for the blind. Test norms are approximately constant for groups varying in environmental and educational conditions. The results of a factorial analysis of the test are also presented.—E. Raskin.

4259. Stern, Henri. Dessins et jeux libres en psychothérapie. (Drawings and free expression in

psycho-therapy.) *Psyché*, 1948, 3, 360-372.—There is much of value in free expression of drawing in psychology and psychotherapy. It has been possible to discover mental illnesses through free expression in drawing, the same as in psychoanalysis, psychotherapy, and various tests. The elements of the subconscious, conflicts, and rare imagination and fantasy can be revealed in such drawings. This procedure has brought out indications which failed to be revealed in both Gestalt psychology and the Rorschach test. As therapy and mental illnesses progress, it is interesting to see the shift and change in these free drawings. This is a form of sublimation which may have quite profound effects. The author presents 36 examples of these free expression drawings.—O. I. Jacobsen.

4260. Taylor, Joseph L. (*Jewish Family Service, St. Paul, Minn.*) Application of the Rorschach in a Jewish vocational agency. *Jewish soc. Serv. Quart.*, 1949, 25, 349-356.—Because the Rorschach Test describes "the nature of intelligence, personality, and styles of adjustment," of normal as well as abnormal people, the author feels that it is useful even though it is not explicitly a vocational test. 4 cases are cited to show how the clinical-deductive use of Rorschach results has been of positive value in vocational guidance.—J. C. Franklin.

4261. Young, Reginald J. (*Binghamton (N. Y.) St. Hosp.*) The value of the Rorschach test in differential diagnosis. *Amer. J. Psychiat.*, 1948, 105, 381-382.—The diagnosis of typical or advanced cases of the various psychiatric syndromes is made without difficulty by competent psychiatrists: One's diagnostic acumen is often put to a severe test, however, in the differentiation of early and incipient cases of mental illness. In this type of case the Rorschach can play the decisive role in the determination of the personality type and diagnosis. It has been the purpose of this paper to present material in a way that psychiatrists not intimately acquainted with the test may readily comprehend how the diagnosis of mental diseases by this technique is arrived at. It is essentially a laboratory tool in a similar category with the Binet-Simon or the electroencephalogram. The Rorschach test should be used more frequently as it has a definite value to the psychiatrist in differential diagnosis.—J. Barron.

[See also abstracts 3989, 4134, 4266, 4378.]

TREATMENT METHODS

4262. Bois, J. S. A. General semantics in psychological practice. *Canad. J. Psychol.*, 1949, 3, 1-5.—The basic features of Korzybski's "General Semantics" are briefly summarized and their application to the treatment of behavior problems reported.—J. W. Bowles, Jr.

4263. Brown, Spencer F. General semantics and physical disability. *J. soc. Issues*, 1948, 4(4), 95-100.—By taking courses in general semantics, indirect aid can be gained in reducing tensions connected with a given physical handicap. Brief psy-

chotherapy may use semantics in suggesting concrete ways to alter behavior. Clinicians themselves can improve their techniques by study of semantics.—L. M. Hanks, Jr.

4264. Carp, Abraham. Psychological test performance and insulin shock therapy. In *Stanford University, Abstracts of dissertations, 1947-1948*. Stanford U., Calif., 1948, 180-183.—(*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4265. DeWitt, Henrietta B. (*Springfield State Hosp., Sykesville, Md.*) The function of the social worker in the total treatment program in a state mental hospital. *Amer. J. Psychiat.*, 1948, 105, 298-303.—The role of the psychiatric social worker should be and is a distinct and separate role from that of the psychiatrist. It is essential that the social worker become the liaison between the hospital and the community if the patient is to be returned to the community. The author describes how the social worker functions from the time of the patient's admission in the Springfield State Hospital until his ultimate discharge. This article describes the social worker's function as not being focused on treating the patient's illness, "but in helping him [the patient] use the reality of his situation for discovering and resolving ways in which his patterns of social behavior interfere with his attaining satisfactions in his personal contacts." Discussion by Dr. Arnold H. Eichert.—R. D. Weitz.

4266. Dolto-Marette, Françoise. Rapport sur l'interprétation psychanalytique des dessins au cours des traitements psychothérapiques. (Report on psychoanalytical interpretation of drawings in a course of psychotherapy treatments.) *Psyché*, 3, 1948, 324-346.—Drawings are often a means of expression and an outlet for maladjustments and frustrations. Abnormal conditions may be indicated in free-hand drawings, and results can be analyzed and interpreted. Various types of personality defects and neurotic tendencies are similarly shown. The author presents 20 drawings to illustrate the various forms of neuroses, as also personality and home maladjustments. Psychotherapy is possible through such interpretations, and free-hand drawing can be a productive treatment which is actually psychoanalytical in nature.—O. I. Jacobsen.

4267. Funkenstein, Daniel H., & Greenblatt, Milton. Changes in the autonomic nervous system following electric shock therapy in psycho-neurotic patients. *J. nerv. ment. Dis.*, 1949, 109, 272-273.—Abstract.

4268. Plaut, A. B. J. Some psychological observations on E.C.T. *Brit. J. med. Psychol.*, 1947-1948, 21, 263-267.—7 cases of failure to improve under electroconvulsive shock are studied from a psychological viewpoint. A common finding is initial resistance against the purely passive role in this kind of therapy, followed by a dependency which makes the patient fear leaving the hospital and resuming normal life outside. A plea is made for

caution in forcing a patient into the dependent and passive role without allowing for his individuality.—*E. R. Hilgard.*

4269. Ruesch, Jurgen. (*U. Calif. Med. Sch., San Francisco.*) Experiments in psychotherapy: II. Individual social techniques. *J. soc. Psychol.*, 1949, 29, 3-28.—A social technique is defined as any method "used by individuals or groups for approach, management, separation, and annihilation of other people. . . . The development of social techniques occurs in several steps: (a) The drives impel the organism to respond. (b) The responses, at first organ-bound, are later generalized to the social sphere. (c) Goal responses and instrumental actions are gradually organized through the addition of general social cues. . . . (d) Later, special social cues are acquired bearing upon the orientation of the individual. . . . (e) Simultaneously the generalization of responses, the acquisition of cues, and the obtaining of rewards are gradually fused and welded into social techniques. . . ." The most adequate social techniques are those which support interaction at a symbolic rather than organ-bound level of behavior and which provide full opportunity for emotional expression. Since persons often become patients because their social techniques are verbally and symbolically deficient, the author believes that non-verbal social techniques are important in psychotherapy for communication and management. Therapy, if it is to be successful, must cope with and alter the organization, number, variety, and complexity of the patients' social techniques. 55 references.—*J. C. Franklin.*

4270. Slavson, S. R., Thaun, Gusta, Tendler, Diana, & Gabriel, Betty. (*Jew. Bd. of Guardians, New York.*) Children's activity in casework therapy. *J. soc. Caswk.*, 1949, 30, 136-142.—The distinct needs of the child resulting from his weak ego organization, the basic narcissistic quality of his libido, and the surface nature of his unconscious brought about the important development of activity group therapy. Play therapy serves not only as a means of communication but also as self-expression, the effect of which is fundamental change in personality structure. Improvements through threatment are demonstrated by several abstracts from selected cases.—*V. M. Stark.*

4271. Walker, Edmund F. Inducing anxiety as a part of the therapeutic method. *J. nerv. ment. Dis.*, 1949, 109, 233-239.—"The intentional production of anxiety in the patient during psychotherapeutic interviews serves a useful purpose in furthering the therapeutic process itself. Induced anxiety can be utilized in (1) forcing the abandonment of a neurotic mechanism which is used as a cloak for the underlying conflict; (2) recovery of historical data which aids in understanding and elaborating on the development of symptoms; (3) forcing the patient into a more mature and realistic manner of adjusting to his environment."—*N. H. Pronko.*

[See also abstracts 4259, 4334.]

CHILD GUIDANCE

4272. Arnou, C. Tendances actuelles de la "child guidance" aux Etats-Unis. (Present trends in child guidance in the United States.) *Criança portug.*, 1947-48, 7, 5-21.—The author recounts a brief visit to the United States wherein she surveyed child guidance clinics in Boston, Baltimore, Philadelphia, and New Haven. The most frequent philosophy of such clinics is neo-Freudian. Treatment is not usually directed towards improvement of specific situations, but is directed towards clarification and self-understanding. Therapy is child-centered. Psychological tests seem to have lost their importance. The author estimates that there are 688 mental hygiene clinics in the United States, 285 of them being for children exclusively. Besides these there are some 600 organizations giving psychiatric advice.—*R. J. Corsini.*

4273. Brun, Gudrun. Child's psychiatry in Denmark. In Brun, G., et al., *Danish psychiatry*, (see 23: 4296), 56-62.—Child psychiatry is described as beginning with the first child guidance clinic in 1935. Psychological testing and special classes followed immediately. Treatment procedures in both in- and out-patient clinics are detailed.—*J. Shor.*

4274. Clarke, David L. A remedial program in child development for group work agencies. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 226-227. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4275. dos Santos, João Augusto. (*Instituto Costa Ferreira, Lisbon, Portugal.*) A clínica de psiquiatria infantil do hospital Júlio de Matos. (The child psychiatric clinic of the Julio de Matos hospital.) *Criança portug.*, 1947-48, 7, 25-37.—The children's psychiatric clinic at the Julio de Matos Hospital is described and evaluated in comparison with the author's home clinic of the Instituto Costa Ferreira. Children's pavilions should be integral but functionally separated aspects of a psychiatric hospital. Such clinics need a great deal of space and equipment due to the energy of children. The research functions of a psychiatric team are outlined, especially in terms of the contributions of psychiatrists. Very little research has been done in the area of child psychiatry, especially concerning game, play, and work therapy. Suggestions for methods of treatment are outlined including group projects. All the adults working in such pavilions should be with the necessary therapeutic spirit and should preferably be young themselves.—*R. J. Corsini.*

4276. Duss, Louisa. Etude expérimentale des phénomènes de résistance en psychanalyse infantile. (An experimental study of the phenomena of resistance in child psychoanalysis.) *Psyché*, 3, 1948, 289-309.—The author gives a brief summary of the development and aims of psychoanalysis, its techniques and interpretations. The reactions of 3 children of varied ages, were presented, one child known to be very well-adjusted, and the other 2

extremely maladjusted. A fable was presented to each child, in turn, and his responses and interpretations were recorded. There was no resistance, revolt, defense, hostility or antagonism shown in responses of the first child, but the other 2 showed fear, antagonism and frustration in their responses and reactions to the same parts of the fable. This shows the absence or presence of resistance as also what has been termed "normal" and "abnormal" responses, due to the nervous conditions of the children. It indicates also a form of projective technique which may be used with small children, whereby abnormal conditions can be analyzed.—*O. I. Jacobsen.*

4277. Freud, Anna. *Einfuehrung in die Technik der Kinderanalyse.* (Introduction into the technique of child analysis.) London: Imago, 1948. 105 p. 5s.—This is a reprint of the second edition published in 1929 which has been long out of print (see 2: 121).—*R. Seidler.*

4278. Lorand, Sandor. The psychoanalytic contribution to the treatment of behavior problems in children. *Amer. J. Psychiat.*, 1948, 105, 357-360.—The trend in psychiatry at present is to approach the understanding of behavior in the light of psychoanalytic psychology. Although we have come a long way, scientific contributions in the field of child psychology need to be enlarged. Psychoanalytic psychology furnishes a fairly comprehensive guide to the manner in which changes in the environment can be effected in order to improve the mutual relationship between child and parent when it becomes necessary to treat the child for his problem behavior. Progress in super ego development depends on the encouragement the child's new ventures are accorded by his environment. Parental instability is an outstanding factor in the case histories of children with behavior problems. Treatment is discussed with respect to the role of both the child and the therapist. Freudian psychoanalysis has pointed out that the child's needs must be the focal point of the therapist's attention and he will frequently have to adjust to those needs, as should the parents and teachers. What therapy calls for, then, is the prevention of further conflicts, the ending of needless frustrations, and the provision of modes of gratification for the young patient at home and at school.—*R. D. Weitz.*

4279. McBroom, Elizabeth, & Froehlich, Ursel. (Herrick House, Bartlett, Ill.) Interpretation of physical disability to children. *J. Soc. Caswk.*, 1949, 30, 154-159.—The services to convalescent children in the age group from 8 to 14 years at Herrick House are designed for rehabilitation of the child following an attack of rheumatic fever. The aim of the program is to restore each child to his own fullest functioning capacity, physically, socially, emotionally, and educationally. Interpretation of physical disability and the acceptance of limitations is important in relieving the child of his anxiety about his condition and effecting a satisfactory pattern for living.—*V. M. Stark.*

4280. Mauco, Georges. *Pédagogie curative.* (Educational therapy.) *Psyché*, 1948, 3, 269-277.—This article describes an established center with the aims of preventing mental, personality, and general disposition maladjustments and defects, so as to have a better-adjusted adult, that is, an adult free from frustrations and anxieties, since these earlier difficulties will have been resolved. Many agencies are cooperating with the center, including the medical, psychiatric, and social, as well as the educational. 2 special case studies are presented and fully described and explained. Relaxation versus anxiety and tension is shown in prescribed treatments. The center not only expects to treat children, but also to reeducate parents and teachers.—*O. I. Jacobsen.*

4281. Richman, Leon H. (Bellefairs-Jewish Children's Bureau, Cleveland, O.) New needs and new approaches in foster care. *Jewish soc. Serv. Quart.*, 1949, 25, 308-318.—The new needs are for foster home care which does not anticipate permanent assimilation of the child into the family, and for foster home placement in which foster parents are paid adequately for performing specified services rather than "rewarded" with the intangible satisfactions of benevolence. We now have more disturbed than orphaned or dependent children needing placement. Many require pre-placement preparation and treatment before foster home assignment. Most foster homes are ill equipped to handle them and their problems though they need the support only a home can provide. Accordingly, traditional institutional placement is usually unsuccessful. Foster home placement today demands unusually cooperative agency-foster home-child-parent relationships. The foster home shortage is in large part due to a history of poor placement which neither helped the children nor satisfied the foster home parents. Moreover, support for the foster home has been niggardly from the first. Realistically, we must establish criteria for placement, for foster home care, and remuneration and support must be in keeping with the appropriate responsibilities.—*J. C. Franklin.*

4282. Santana Carols, V. M. A recuperação social da infância irregular. (The social improvement of abnormal children.) *Criança portug.*, 1947-48, 7, 81-240.—This is a report of a survey of institutions in Europe dedicated to the rehabilitation of children. Although in most countries such homes are operated by the government, private initiative maintains some homes, especially in Holland, Switzerland, and Belgium, through religious orders. Institutions tend to be of two types: normal and abnormal. In the latter class, institutions for the feeble-minded predominate. Most children's institutions tend to be small, with population of 150-300 children, but in some countries (Sweden and Denmark) former private houses have been adapted to hold 30-45 children. In most cases, the staffs are specially trained. The institutions of Belgium, Denmark, Spain, Holland, England, Italy, Switzerland, and Sweden were visited. 44 photographs of

the institutions and activities are included.—R. J. Corsini.

4283. Wineman, David. (Wayne U., Detroit, Mich.) Group therapy and casework with ego-disturbed children. *J. soc. Casewk.* 1949, 30, 110-113.—The realistic application of casework techniques in group therapy for children with severe ego-disturbances is demonstrated. Pioneer House, in Detroit, was an institution which offered a flexible activity climate for boys between the ages of 8 and 11 who were strongly fixated upon primitive action symptomology. Therapeutic recreational programming was based on the principle of suiting the need of the child. Problem awareness through interview therapy was used when feasible.—V. M. Stark.

[See also abstracts 4157, 4166, 4372, 4373, 4387, 4422.]

VOCATIONAL GUIDANCE

4284. Anderson, Rose G. (Psychological Serv. Center, New York.) Preferred ages for vocational counseling. *Occupations*, 1948, 27, 77-81.—A questionnaire study of 416 men and 265 women who had received vocational counseling indicates they found the experience to be of real value. The general conclusions made from the study are that problems of vocational indecision and readjustment occur at all age, ability, and educational levels.—G. S. Speer.

4285. Dresden, Katharine W. (Stanford U., Calif.) Vocational choices of secondary pupils. *Occupations*, 1948, 27, 104-106.—The author presents "subjective, individual, and non-statistical" evidence to support her contention that data obtained from questionnaire surveys are frequently misleading. It is felt that the true vocational goals are much closer to the individual's abilities than he is willing to record on a questionnaire.—G. S. Speer.

4286. Figuerido, C. A. Oficina-laboratorio de Orientación y Selección Profesional de Bilbao. (The Office-laboratory of Vocational Guidance and Selection of Bilbao.) *Rev. Psicol. gen. aplic.*, Madrid, 1948, 3, 359-374.—The activities of the organization described above are reviewed.—A. J. Smith.

4287. Fleming, Ralph D. (N. Y. State Educ. Dept., Albany, N. Y.) Vocational information by mail. *Occupations*, 1949, 27, 399-400.—Requests for information addressed to the Guidance Bureau of the State Department of Education are analyzed.—G. S. Speer.

4288. Jepsen, Victor Louis. Scholastic achievement and vocational success. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 292-296.—(Stanford Univ. Bull., 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4289. Lawrence, Paul F. Vocational aspirations of negro youth in secondary schools in California.

In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 299-303. (Stanford Univ. Bull., 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4290. Michaux, William. (Duke U., Durham, N. C.) Interpreting occupational group data on the Kuder Preference Record. *Occupations*, 1948, 27, 82-89.—Tables are presented showing "highest," "dominant," and "neutral" interest patterns on the *Preference Record*, related to occupations, occupational groups, and DOT and USES code numbers. Suggestions are given for the use of these tables in counseling.—G. S. Speer.

4291. Ross, Roland G. (Board for Vocational Educ., Des Moines, Ia.) Occupational information in the schools; an opinion poll of Iowa teachers. *Occupations*, 1949, 27, 397-398.—A study of the attitudes of 562 Iowa teachers indicates that the teachers feel that occupational information is important, and should be included in classroom instruction as part of the subject matter. The teachers feel that they have insufficient training to give this information, and that their work should be correlated with the counselors.—G. S. Speer.

4292. Seeman, Julius. (U. Chicago, Ill.) A study of client self-selection of tests in vocational counseling. *Educ. psychol. Measmt.* 1948, 8, 327-346.—A group of 50 clients who came voluntarily to the University of Minnesota's Student Counseling Bureau for vocational counseling were given the responsibility for choosing the type of tests they wished to take. The counselor described the available tests and the information the client could secure from each test, but in no way modified the clients' choices. An analysis of the test selections made by this group showed that they chose tests available for "actuarial" or clinical prediction in over 90% of the possible cases and that they tended to select tests appropriate to their needs. Clients who were indecisive in their test selections were also more frequently uncertain in other phases of their interviews. Excerpts from the recorded interviews are presented in the study, illustrating the varying reactions of clients to the self-selection process and the way in which the process permits the client to "come to terms with his own feelings and attitudes."—E. Raskin.

4293. Stone, C. Harold. (U. Minnesota, Minneapolis.) Are vocational orientation courses worth their salt? *Educ. psychol. Measmt.* 1948, 8, 161-181.—This is a report of the evaluation study on vocational orientation courses which was undertaken in the General College of the University of Minnesota. Pretest and retest measures of vocational information, reasonableness of vocational choice, etc., were given to experimental groups of freshmen who elected the vocational orientation sequence and matched control groups not enrolled in these courses. Students in the experimental groups at the end of the year had more vocational information and tended to adjust their vocational choices to more appropriate levels than did students in the control group.

However, enrolment in vocational orientation courses alone did not cause students to make more appropriate vocational choices in terms of abilities, aptitudes, and interests. Only when these students were also given individual counseling was there a marked increase in the proportion of optimal vocational choices. The courses seemed to serve as a preparation for counseling and tended to reduce the time necessary for resolution of vocational and educational counseling. The most successful approach to a vocational guidance program for schools and colleges suggested by the findings of this study would be an integration of individual analysis with group discussion of occupational opportunities and vocational information. 16 references.—*E. Raskin.*

[See also abstracts 3991, 4244.]

BEHAVIOR DEVIATIONS

4294. Brock, Samuel. Dynamic mechanisms underlying some forms of cerebral dysfunction. *Amer. J. Psychiat.*, 1948, 105, 246-253.—Students of neurophysiology have paid a great deal of attention to the mammalian cerebral cortex, but it is felt by the author that there is still a need to be concerned with the dynamic conceptions underlying symptom formation in human brain disease. From such a discussion "it may be possible to define some components of abnormal cerebral functions in terms of modern neurophysiology." In the past abnormal signs of behavior were classified as "reversion to a more primitive type of nervous function;" this led to far fetched views: Hughlings Jackson concluded that nervous tissue including the brain, disposed of nervous energy in health by storing up "force and expending it in an orderly manner at the provocation of special excitations." The author reasons that in the abnormal case the nervous energy "becomes either blocked or jammed, and abnormally stored and discharged" causing a dysfunction. The defining of the anatomical basis of psychic symptoms should now begin since, "in the last analysis all remarkable phenomena of mental disease are due to neuronal dysfunction."—*R. D. Weitz.*

4295. Brody, Eugene B. (Yale U., New Haven, Conn.) Psychiatric problems of the German occupation. *Amer. J. Psychiat.*, 105, 286-291.—The soldier in the occupation army is faced with a basic conflict, that of the ideals of home and with large numbers of available sexually acceptable women. Here he also has the fear of getting venereal diseases, this fear being instilled in him by the Army. The "artificial pattern of occupation life encourages the development of latent neurotic potentialities." Other problems and conflicts are faced by the soldier's dependents and by civilians working for the occupational forces. Efforts have been made to stabilize American community life but until these efforts lessen the conflict-building situations to a great degree, it must be expected "that psychiatric problems associated with social and psychological

environment of occupied Germany will continue to be seen in occupational personnel."—*R. D. Weitz.*

4296. Brun, Gudrun; Nørvig, Johs., Smith, Jens Chr., & Stürup, Georg K. Danish psychiatry, 1948; lectures delivered before The Danish Society of Psychiatry on June 9, 1948. Copenhagen: Det Schønbergske, 1948. 62 p.—These lectures are abstracted individually in this issue (see 23: 4273, 4302, 4303, 4329).—*J. Shor.*

4297. Dozier, Paul. Nutritional aspects of modern psychiatric problems. *Proc. Conf. Child Res. Clin. Woods Schs*, 1948, 21-23.—The part nutrition plays in the successful treatment of neurotics and alcoholics is described by the author.—*L. Long.*

4298. Inman, W. S. Clinical observations on morbid periodicity. *Brit. J. med. Psychol.*, 1947-1948, 21, 254-262.—The frequency with which eye-symptoms develop on Good Friday show how they may be associated with guilt feelings, especially about sex and birth. Numerous illustrations are given in which anniversaries or recurrent holidays (Christmas, Easter) figure as the onset dates for eye illnesses. With the decline of religious observances, other anniversaries or time periods probably will come to serve the purposes of conscience.—*E. R. Hilgard.*

4299. Levine, Julius; Rinkel, Max, & Greenblatt, Milton. Pervitin in neuropsychiatry (comparison with sodium amytal and benzedrine sulphate.) *J. nerv. ment. Dis.*, 1949, 109, 277-278.—Abstract.

4300. Myerson, Paul G., & Landau, David. Tapping rhythms in neuropsychiatric cases. *J. nerv. ment. Dis.*, 1949, 109, 277.—Abstract.

4301. Pophal, Rudolf. Graphology und Medizin. (Graphology and medicine.) *Grenzgebiete Med.*, 1948, 1, 18-21.—By the use of 6 reproductions of handwriting samples the author illustrates the effect of various somatic disorders on handwriting.—*H. L. Ansbacher.*

4302. Smith, Jens Chr. The situation and working conditions of Danish psychiatry. In Brun, G., et al., *Danish psychiatry*, (see 23: 4296), 7-25.—3 questions are considered: (1) laws and other rules concerning mental patients and mental hospitals (statutes and practices), (2) the apparatus of which the psychiatrists dispose, i.e., hospitals, staffs, beds, clinics, patient loads, (3) the particular difficulties caused by the post-war effects. The 1938 law on the hospitalization of mental patients is given in full.—*J. Shor.*

[See also abstracts 4012, 4128.]

MENTAL DEFICIENCY

4303. Nørvig, Johs. State care for mental defectives in Denmark. In Brun, G., et al., *Danish psychiatry*, (see 23: 4296), 26-43.—The 1934 State Mental Deficiency Act is quoted in full and its practical workings are explained. Special problems considered include the "Social Committees" which

petition for examination of possible defectives, the rules for castration and criminal responsibility, as well as the patient loads, available institutions, and special educational and vocational training.—J. Shor.

4304. Peiser, J. (*Ruth-House for Defective Children, Jerusalem.*) *Al y'sodot hulshat hasekheh b'gil hayaldut uv'ayoteha.* (The origins of mental deficiency in children and its problems.) *Harefuah*, 1947, 33, 68-70.—120 children in a school for mentally retarded children with an IQ below 75 were examined. 40% of them were firstborn, 27% second, 12% third children. 19% were born of consanguineous parents (in comparison with 4% only in a "normal school" in Jerusalem). 11% had fathers and 5% mothers over 40 years of age. At birth they weighed less than other babies, also their length was smaller. 51% boys had subnormally developed external genitals. There is no difference in the percentage of lefthandedness between deficient and normal children in Jerusalem. More than a half of the deficient children showed microcephaly, 12% showed mongolism, 6% suffered from epilepsy, and 5% from congenital cerebral infantile paralysis. In 30% of all cases deficiency was due to external causes (16% due to difficult birth; 14% deficiency acquired after birth, e.g. encephalopathy particularly following whooping-cough.) Endocrine therapy is of no avail in genuine mental deficiency; research, however, has led to a more effective treatment, resulting in relative improvement of infantile deficiency.—H. Ormian.

4305. Schacter, M. *Étiologie problématique d'un oligophrène grave.* (Etiological considerations in the case of a low-grade feeble-minded person.) *Criança portug.*, 1947-48, 7, 47-49.—A clinical description of a 2½ year old feeble-minded boy is given, together with some scanty family history. His father was an alcoholic, his mother had a long term thyroid condition. The possibility is discussed that the mother's condition might have been due to the fact that her mother had been excessively examined radiologically when pregnant.—R. J. Corsini.

[See also abstract 4425.]

BEHAVIOR PROBLEMS

4306. Boutonier, Juliette. *Les niveaux affectifs.* (Deficient nerves.) *Psyché*, 1947, 2, 1402-1406.—The question is posed as to the possibility of existence of deficient nerves and emotionality, the same as deficient intelligence. This emotionality seems, according to the author, to involve the sexual aspects, and the conceptual developments before 3 years of age, at 3 years, at 5 years, and beyond 5 years, which are stressed. A Commission on Sex Education for the French Ministry of Education, for the study of this problem, has been constituted. The Freudian concept and psychoanalytical approach are favored. The author asks the question as to the condition of deficient nerves which may inhibit intelligence.—O. I. Jacobsen.

4307. Kraus, G. *Over de psychopathologie en de psychologie van de waarneming van het eigen spiegelbeeld.* (About psychopathology and psychology of perception of the mirror-image of self). *Ned. Tijdschr. Psychol.*, 1949, 4, 1-37.—The mirror plays an important rôle in belletristic literature, ethnology and folklore, which can partly be explained by phenomena observed in pathological circumstances. Examples of these are given, such as abnormal interest in the mirror, sensations of strangeness, faulty identification of the image, negative heautoscopies, and heautoscopie experiences in front of the mirror. Disturbances in function of the body-scheme can often be found as a cause of these pathological phenomena. 98 references.—(Courtesy of *Ned. Tijdschr. Psychol.*)

4308. Meyer, —. *Trois cas.* (Three cases). *Psyché*, 1947, 2, 1380-1386.—3 cases, for psychoanalysis, are presented here which indicate methods of overcoming nervous disorders. The first case is that of a man who has developed an inferiority complex, and through dream analysis and therapy, is relieved on realizing that his brother is the cause of his feelings of inferiority. The second case is one of a lady married for 6 years, and who looked on men and sex as evil and immoral, until she recalled a painful sexual experience brought on her by her uncle when she was 6 years old. This had created a phobia for sex and for all men, but her recall of the experience made her realize that sex is normal. She did adjust to life—a case of psychosomatic cause of nervous disorder. The third case was that of a 40-year old mother of 6 children, with hypochondriac symptoms, and constipation. Her father had been a military man who gave orders, and during her childhood, she felt that he could order anything to occur which he might wish or want. She had felt that she too might do the same. Since she realized that this was a desire, she also realized that auto-suggestion had brought on her illness, it too cured it in the same manner it had been brought on.—O. I. Jacobsen.

4309. Perrotti, Nicola. *La phobie du communisme.* (The fear of Communism.) *Psyché*, 1947, 2, 1374-1379.—The author presents two cases, a man and woman, both of whom had developed great fear of Communism, and its engulfing the country. It is similar to the fear of death, of darkness, or of "it" in which there is no understanding of what the feared object is, merely that it is to be feared, and is something evil. "It" is feared because of changes in social and political life, and because of news discussions and of propaganda, and trends toward liberalism. Some of these fears of Communism can be given psychoanalytical explanations, along with other phobias.—O. I. Jacobsen.

4310. Pullar-Strecker, H. (*Wyke House, Isleworth, Middlesex, Eng.*) *A review on the literature of addiction.* *Brit. J. Addict.*, 1948, 45, 125-176.—Reviews literature on addiction published between 1945 and April 1948. I. Campaign against alcoholism. II. Social, economic, cultural, legal

aspects. III. Psychological aspects. IV. Clinical aspects. V. Biochemistry, pharmacology, physiology, experimental pathology. VI. Treatment. VII. Literature. (Courtesy of *World Res. Alcoholism*.)

4311. Scott, W. Clifford M. Notes on the psychopathology of anorexia nervosa. *Brit. J. med. Psychol.*, 1947-1948, 21, 241-247.—Review of a number of reported studies on anorexia nervosa shows the need for further collaborative work among psychiatrists, psychoanalysts, physiologists, endocrinologists, nutritional experts. Occasionally patients reach a point where they must be fed or they will die. But sometimes if fed they become psychiatrically more seriously ill. Brief notes are given on 4 patients treated by the author, showing the importance of unconscious factors in producing the symptoms.—E. R. Hilgard.

4312. Wikler, Abraham. (U. S. Publ. Hlth Serv. Hosp., Lexington, Ky.) Recent progress in research on the neurophysiologic basis of morphine addiction. *Amer. J. Psychiat.*, 1948, 105, 329-338.—Summarized in this paper are some of the experimental data acquired in recent years in the neurophysiological laboratory of the U. S. Public Health Service Hospital. This information is integrated with clinical impressions derived from psychiatric studies of morphine addiction in man. The effects of morphine addiction on intact dogs with "experimental neurosis," on chronic decorticated dogs, and on chronic spinal dogs are considered. Certain experiments with other drugs, because of the bearing they have on the problem of morphine addiction, are described. A table illustrating the interrelation of "physical" and "psychic" dependence is presented. 26 references.—R. D. Weitz.

[See also abstract 4175.]

SPEECH DISORDERS

4313. Pravdina, O. V. Ob ispravlenii rechi oo zaeekaiutshichsia detey. (On the correction of speech of stuttering children.) *Semia i Shkola*, 1948, May, 33-34.—Stuttering is defined as an illness which prevents the easy flow of speech. Its onset may be sudden, as a result of traumatic experiences, or gradual and, at first, imperceptible. Overindulgence by parents tends to augment rather than cure the speech disorder. They are advised the following: setting examples of clear diction; avoidance of undue taxation of the child through the introduction of difficult verbal material; matter-of-fact attitude toward the child's speech difficulty; implicit and expressed faith in its ultimate recovery. Similar measures are recommended for the handling of preschool children with such speech handicaps: examples of clear enunciation by the educators; careful age grouping to avoid competition with children of a higher verbal development; provision for group, rather than for individual public appearances; encouragement of oral expression of simple and well re-

hearsed material. Severe cases should be referred to a speech pathologist.—M. G. Nemets.

4314. Schacter, M., & Cotte, S. Du symptôme névrotique à la constellation névrotique familiale. (Neurotic symptoms in the neurotic family constellation.) *Criança portug.*, 1947-48, 7, 57-64.—A stuttering child who did not respond well to speech correctional treatment was examined to find out whether emotional causes might not exist to prevent treatment. Home study indicated a father who was jealous of his wife's affection for their children. The Rorschach test was administered to all 6 members of the family and it appeared that the father troubled all the remaining members to some degree. Removing the child from his family improved his speech considerably.—R. J. Corsini.

CRIME & DELINQUENCY

4315. Frank, Sigwort. Zur Prophylaxe und ambulanten Therapie des Verbrechens. (Prophylaxis and ambulant therapy of crime.) In Meng, H., *Die Prophylaxe des Verbrechens*, (see 23: 4323), 265-285.—The author shows with several case studies the coaction and interaction of unfavorable inherited characteristics, illness, and environmental influences. The criminal court should not send criminal neurotics to institutions if the neurotic has sufficient treatment and is not dangerous.—C. Bondy.

4316. Gagnieur, J. P. The judicial use of psychonarcosis in France. *J. crim. Law Criminol.*, 1949, 39, 663-666.—The French Court is in abeyance of a necessary decision regarding the use of psychonarcosis in the course of judicial investigation. A case is shown to prove its use in revealing a malingerer and substantiating his guilt. However, the Bar was of the opinion that the individual was deprived of his free will, questioned outside the presence of his advisers, and denied professional secrecy. The medical expert who administered the drug apparently will be prosecuted on a charge of assault and battery. The author puts the question whether it is in protecting lies, rather than in the search of truth, that the respect of human dignity stands.—V. M. Stark.

4317. Karpman, Benjamin. Criminality, insanity and the law. *J. crim. Law Criminol.*, 1949, 39, 584-605.—The view of a minority of psychiatrists based on a broad and comprehensive conception of mental disorder is presented. The neurotic and psychopath are regarded as not being legally responsible for any crime they commit since their behavior is unconsciously motivated. Criminality growing out of defective judgment as a result of a particular mental disorder, mental deficiency, and emotional disturbances is discussed. Cases are offered which demonstrate that the individual may not be insane in the accepted sense, as showing obvious evidences of mental aberrations and yet be driven to commit criminal acts predicated on impulsive drives over which the individual has no control.—V. M. Stark.

4318. Kielholz, Arthur. Verhütung von Verbrechen bei Perversionen. (Prevention of crimes

by perverse criminals.) In *Meng, H., Die Prophylaxe des Verbrechens*, (see 23: 4323), 371-454.—The author is the superintendent of a Swiss State asylum, and reports in chapter one about criminal patients with sexual abnormalities. He gives statistics as to crime, diagnoses, grade of legal responsibility, and discusses also punishment and other measures used with perverse criminals. In chapters 2 to 4 he describes the different perversions in their relationship to crimes. In the fifth chapter he discusses the methods of prevention of crimes, among others therapy, birth control, better training of physicians, hygiene during pregnancy, mental hygiene, special institutional care, and better general education. 37 references.—C. Bondy.

4319. Kielholz, Arthur. *Verhütung von Verbrechen bei Psychosen*. (Prevention of crimes caused by psychoses.) In *Meng, H., Die Prophylaxe des Verbrechens*, (see 23: 4323), 287-370.—In the first part the author deals with the different forms of psychoses, and the different crimes committed by criminal psychotics. He discusses in detail the problem of responsibility. In the second part the different psychoses are discussed in connection with their therapy and prophylaxis. The third part shows how clarification, religion, and art can be used for treating psychotic criminals. Each part has a bibliography.—C. Bondy.

4320. Kinberg, Olof. The moral function as an objective social phenomenon. *Brit. J. med. Psychol.*, 1947-1948, 21, 278-288.—Illustrations are given of methods used in the study of criminals (and suspected criminals) in the Clinic of Forensic Psychiatry at Stockholm. The analysis of the moral emotion is very important for criminal psychology. The study of the moral functions in normal persons is essential to understanding these functions in the abnormal.—E. R. Hilgard.

4321. Loosli, Carl Albert. *Bemerkungen zur Anstaltsreform*. (Remarks concerning the reform of institutions.) In *Meng, H., Prophylaxe des Verbrechens*, (see 23: 4323), 455-473.—Reform of institutions is only possible if men decide to come to a reasonable self preservation through "a new order of society by mutual education to peace, to freedom, to humanity, consequently to the highest possible amount of cooperation." The educational purpose must be the highest of all; there must be sufficient funds; no overcrowding of institutions, many sided and special vocational training of all institutional workers; real and unselfish love for young people; far reaching enlightenment of society; also through well-planned regular press and radio service. Without all these presuppositions no reasonable, meaningful institutional work, especially as far as prisons are concerned, is possible.—C. Bondy.

4322. Meng, Heinrich. *Präventiv-Hygiene des Verbrechens*. (Hygiene as crime prevention.) In *Meng, H., Die Prophylaxe des Verbrechens*, (see 23: 4323), 475-528.—Seen from the statistical point of view the fight against crime is a failure, but individual successes show that we are on the right track.

Correct prophylaxis against crime will also prove to be prophylaxis against war. Freud's teachings (especially on psychoanalysis and transference) will play a strong role in the new efforts. Aims of prophylaxis and treatment against waywardness are: (1) to develop in the wayward the ability to respect the other man; (2) to educate society to allow for individual development; (3) to prevent society from getting wayward.—C. Bondy.

4323. Meng, Heinrich. [Ed.] *Die Prophylaxe des Verbrechens*. (Prophylaxis of crime.) Basel: Benno Schwabe, 1948. xv, 568 p. Fr. 34.—In the introduction the editor states that this book is written by 7 authors who have worked both scientifically and practically in the fields of psychiatry and mental hygiene, sociology, law, psychology, education, prison and institutional work. Ideas which are found in many of the articles are the following: crime cannot be efficiently fought merely by criminal law enforcement; a new international law is necessary; and there are ways and means of preventing wars and crimes. The great influence of Sigmund Freud is emphasized in the introduction and throughout the book.—C. Bondy.

4324. Mezger, Edmund. (*Kaulbachstr. 89, Muenchen 23, Germany*.) *Homotrope und polytrope Verbrecher*. (Homotropic and polytropic criminals.) *Grensbiete Med.*, 1948, 1, 12-15.—In analogy to the classification of neurotics, criminals have been classified into situation (occasional) criminals and character (habitual) criminals. The latter in turn have been divided into homotropics who so-to-speak specialize in one form of crime and the polytropics who have a great variety of different types on their record. The author questions the usefulness of such classification unless it affords greater insight into the personality of the criminal. Much research in this area is still needed, but a beginning has been made by Stumpfl (1939) and Willibald Maier (1944) both of whom conclude that it is the polytropic criminal who presents the less favorable personality picture.—H. L. Ansbacher.

4325. Reiwald, Paul. *Verbrechensverhütung als Teil der Gesellschaftspsychohygiene*. (Prevention of crime as a part of social mental hygiene.) In *Meng, H., Die Prophylaxe des Verbrechens*, (see 23: 4323), 105-262.—The author discusses in the first part, the tasks of social mental hygiene and compares the neurosis and the "abnormal affect situation," (Affektlage) as characteristics of crime. In the second part he describes the causes of crime and methods of prevention. He divides the causes into economic, social, and affective. The third part deals with the abandonment of emotionalism in criminal justice. There are bibliographies after different chapters which include references from many countries, especially from Switzerland, England, U.S.A., and Germany. Many case studies are used.—C. Bondy.

4326. Repond, André. "Gentlemen Cambrioleurs." *Zur Psychopathologie, Psychotherapie und Psychohygiene an jugendlichen Dieben und*

Betruegern. (About psychopathology, psychotherapy and mental hygiene in relation to young thieves and deceivers.) In *Meng, H., Die Prophylaxe des Verbrechens*, (see 23: 4323), 1-66.—The title of this article goes back to a series of famous French crime stories. The author presents 25 case studies of patients, 3 girls and 22 young men ranging in age from 17 to 25 years of age. He discusses their family situations, their symptoms, the probable causes of their dissocial syndromes, the possible forms of treatment, and the success of the treatment. The principal treatment consisted of psychoanalysis in an institution. This treatment was difficult as only one of the 25 patients came for treatment of his own volition. The length of treatment was from less than 3 to not more than 18 months, which is generally considered too short by the author. 46% of all cases became socialized after the treatment.—*C. Bondy*.

4327. Rotten, Elisabeth. Probleme um das Jugendstrafrecht. (Problems concerning the criminal law for juveniles.) In *Meng, H., Die Prophylaxe des Verbrechens*, (see 23: 4323), 67-103.—The principles dealing with the criminal law for juveniles, the juvenile court, institutions, and probation and parole for juvenile delinquents are discussed. Typical examples of practical work in Switzerland, the United States of America, and Germany are cited. The criminal law for juveniles is not a diminution of the general criminal law, but a law of a completely different kind. It is at the same time a pioneer for a reform of the criminal law for adults. Emphasis is put on the work and writings of Pestalozzi.—*C. Bondy*.

4328. Selling, Lowell S. Forensic psychiatry. *J. crim. Law Criminol.*, 1949, 39, 606-617.—Discussion of the contributions psychiatry can make in the courts includes: (1) aid in evaluating testimony, (2) advice as to proper treatment of wards, particularly children, (3) psychiatric diagnosis and the ability of the individual to stand trial, and (4) post-trial therapy. It is further concluded that the functions of probation and corrective institutions must be re-evaluated in this vein.—*V. M. Stark*.

4329. Stürup, Georg K. Treatment of psychopathic criminals in Denmark. In *Brun, G., et al., Danish psychiatry*, (see 23: 4296), 44-55.—The Danish Criminal Law of 1930 is discussed in relation to insanity, mental deficiency and criminal responsibility generally. Available institutions are described. Patient loads are discussed with statistics as to criminal acts and diagnosis. Psychiatric and psychotherapeutic procedures are presented in greater detail.—*J. Shor*.

PSYCHOSES

4330. Boltz, Oswald H. A report of spontaneous recovery in two cases of advanced schizophrenic organismic stagnation. *Amer. J. Psychiat.*, 1948, 105, 339-345.—This report concerns itself with the clinical course of 2 so-called "deeply regressed"

schizophrenic patients together with a discussion of certain relationships which may be deduced therefrom. "Organismic stagnation" is substituted for the current official psychiatric term, deeply regressed. The reasons for this choice of terminology are discussed. Recovery from the psychosis occurred spontaneously. The author lists 12 constructive points which, in his opinion, are suggested by the 2 cases indicated.—*R. D. Weitz*.

4331. Cardona, Filippo. Le idee e le creazioni degli alienati sul soprannaturale. (Ideas and creations of the mentally deranged concerning the supernatural.) *Arch. Psicol. Neurol. Psychiat.*, 1948, 9, 375-394.—In opposition to Dumas the present author does not see an analogy between the origination of notions of the supernatural in schizophrenics or other mental patients and the origination of such notions in primitive man. In the mentally deranged it is rather a question of pseudo-creation, i.e., of combination of fragments of traditional supernaturalism. The mental patient differs from the primitive in that, while the latter gives antecedence to the good spirits over the evil ones, the mental patient creates first evil spirits and then with time, in defense, the good spirits.—*F. C. Sumner*.

4332. Gould, Louis N. Verbal hallucinations and activity of vocal musculature; an electromyographic study. *Amer. J. Psychiat.*, 1948, 105, 367-372.—The auditory hallucination in schizophrenia has been regarded by many as a fundamental symptom. Involvement of the speech mechanism in auditory hallucinations has been known but not emphasized. This paper is a report on the electromyographic study of the vocal musculature of patients who were hearing "voices," for the purpose of determining a possible relationship between verbal hallucinations and the psychomotor mechanism of speech. Hyperactivity of vocal musculature in the psychotic appears related to the presence of verbal hallucinations. The electromyogram of the vocal musculature offers a laboratory method for determination of presence of verbal hallucinations and for the graphic portrayal of change of tension following treatment. A theory of verbal hallucinations is tentatively reaffirmed concerning involuntary intensification of the psychomotor mechanism of speech. A study of muscle tension patterns by means of simultaneous electromyograms is suggested. 15 references.—*J. Barron*.

4333. Hales, William, & Simon, Werner. (V. A. Hosp., St. Cloud, Minn.) Minnesota Multiphasic Personality Inventory patterns before and after insulin shock therapy. *Amer. J. Psychiat.*, 1948, 105, 254-258.—A preliminary report on a study dealing with the administration of the Minnesota Multiphasic Personality Inventory to 20 schizophrenic patients before and after insulin shock treatment. Ten patients recovered either completely, or in some degree, while 10 showed no improvement after treatment. The MMPI profiles of the improved, and the unimproved groups, were compared. It was found that there were "no marked

differences in the scores of the two groups on the psychoneurotic components of the inventory. "There is, however, a definite trend on the so-called psychotic triad; i.e. paranoia, psychasthenia, and schizophrenia." Further study is now being done on a larger group of patients from which the authors hope to obtain a scientific method of selecting those patients who will benefit most by insulin shock therapy.—R. D. Weitz.

4334. Roland, Paul E. (V. A. Hospital, Danville, Ill.) An exploratory training technique for the re-education of catatonics. *Amer. J. Psychiat.*, 1948, 105, 353-356.—This is a pilot research in the coordinate fields of corrective therapy and educational therapy. The research is primarily in the field of relearning and gives little stress to the development of insight. The techniques used were applicable to group methods. It was decided to apply these techniques to catatonic schizophrenics because many of these disabilities present nursing problems in the mental hospital. 26 patients have received treatment in the clinic from April 15 to August 1, 1947. Favorable responses were obtained in all but 2. There is marked improvement in all from the standpoint of verbalization, relaxation, orientation as to time and place, and concentration. In conclusion, a few pertinent points which may serve as a guide in contemplated corrective measures are suggested.—R. D. Weitz.

4335. Ross, W. D. Group psychotherapy with psychotic patients and their relatives. *Amer. J. Psychiat.*, 1948, 105, 383-386.—Experiments are described in the use of group psychotherapy with schizophrenic patients in a mental hospital, and with their relatives in a separate group. These were started to help the mothers of young chronic male schizophrenics to adjust to their sons' illness and hospitalization. The mothers benefited considerably, and the sons showed some temporary but slow improvement. The psychotherapy is rapport-increasing, educational, and insight-promoting, at a level concerned with socialization, but not with deep analysis. The discussions with relatives are aimed to modify traumatic attitudes by them to the patients, and to obtain leads for more fruitful discussion with the patients.—J. Barron.

4336. Stern, A. (Bikkur-Holim Hosp., Jerusalem.) Shizofrenia v'daleket rishtit pigmentosit. (Schizophrenia and retinitis pigmentosa.) *Harefuah*, 1947, 33, 103-104.—Clinical observations have showed that the rarely occurring, mostly hereditary retinitis pigmentosa is by no means an isolated ocular disease, but frequently associated with malformations, retarded development, hereditary degenerative processes, and several metabolic disturbances. Various mental disturbances also play a considerable rôle; whereas mostly defective intelligence culminating in imbecility and idiocy on the one hand, and emotional disturbances such as depressions on the other hand, are encountered, combination with schizophrenia appears to be very rare. Details are given of a female patient, though no

definite conclusions can be drawn from this individual case.—H. Ormian.

4337. Tronconi, Vittorio. (U. Pavia, Italy.) Del concetto di dimenza. (On the concept of dementia.) *Arch. Psicol. Neurol. Psychiat.*, 1947, 8, 289-305.—A review is made of characterizations of dementia from ancient times to the present. From these various characterizations the author concludes that it is necessary to leave to the medical expert to pronounce on the exact nature of the mental deterioration, on its more or less rapid evolution, on the existence of damage, on the social consequences, and on the possibility of recovery and cure. 57 references.—F. C. Sumner.

PSYCHONEUROSES

4338. Ascher, Eduard. (Henry Phipps Psychiatric Clinic, Baltimore, Md.) Psychodynamic considerations in Gilles de la Tourette's disease (maladie des tics); with a report of 5 cases and discussion of the literature. *Amer. J. Psychiat.*, 1948, 105, 267-275.—The author reviews the literature and 5 cases of Gilles de la Tourette's disease, treatment for 4 of which cases was given at the Henry Phipps Psychiatric Clinic. It has been observed by the author that this is a rare disorder which is characterized by compulsive jerkings of the voluntary musculature, accompanied by coprolalia and frequently also echolalia and echokinesis. No organic basis for this disease has been discovered. The patients are usually characterized by being well balanced, obedient, perfectionistic as children, but show marked changes at the outset of the illness. Although the meaning of the motor movements is not entirely understood, the symptoms of echolalia and coprolalia appear to be related to certain attitudes the patient had toward one or both parents. Resemblance has been found between Gilles de la Tourette's disease, and the symptomatology of schizophrenia. 22 references.—R. D. Weitz.

4339. Brožek, Josef, & Schiele, Burtrum C. (U. Minnesota, Minneapolis.) Clinical significance of the Minnesota Multiphasic F scale evaluated in experimental neurosis. *Amer. J. Psychiat.*, 1948, 105, 259-266.—36 individuals volunteered for a one year semi-starvation experiment at the University of Minnesota, in which the conditions of the Europeans were simulated as closely as possible. A battery of psychological tests were given to these people before, during, and after the period of semi-starvation. During this project it was found that in the cause of semi-starvation, individuals suffered pronounced personality deterioration, which was reflected on the neurotic and in some cases, on the psychotic scales of the MMPI. "The analysis of the critical items of the F scale demonstrated that the overwhelming majority were in complete agreement with the clinical picture." It is therefore necessary not to interpret a high F score as necessarily evidence of the invalidity of the profile; since a high F score may often "indicate the presence of a significant personality disturbance." 18 references.—R. D. Weitz.

4340. Giltay, H. *De neurotische Mensch.* (Neurotic man.) *Ned. Tijdschr. Psychol.*, 1948, 3, 484-508.—Neurotic man is an undeveloped personality. Psychical development of man is difficult. Nearly everyone suffers from a "neurotic conflict": the conflict between the urge of becoming adult, to have an independent existence in the outerworld and the wish to remain a child, safely stowed. Culture and neurosis are based on the very prolonged helplessness and dependence of manchild, which is the result of his biological retardation. The general urge of man to cling to his infantile life with father and mother or to react on it in phantasy, is strengthened by the early libido fixation to the parents (Oedipus Complex), which is based on the fact that soma- and germa-development are not retarded in the same way. One of the main therapeutic, i.e., re-educative tasks, is the demolition of the "Ueber-Ich" and imitated ego-ideals. Still more important is: to prevent the building of an "Ueber-Ich" in education. Neurosis-prophylaxis asks therefore a psychologically founded re-education of parents and other pedagogues.—*M. Dresden.*

4341. Great Britain Air Ministry. *Psychological disorders in flying personnel of the Royal Air Force, investigated during the war, 1939-1945.* London: His Majesty's Stationery Office, 1947. 344 p. 7s. 6d. (Available from British Information Service, New York.)—Containing a series of reports by Air Vice-Marshal Sir Charles P. Symonds, consultant in neuropsychiatry, Wing Commander Denis J. Williams, specialist in neuropsychiatry in the Air Forces of Great Britain, and others. Separate abstracts for the various chapters are included in this issue.—*M. A. Seidenfeld.*

4342. Hill, A. Bradford, & Williams, Denis J. *Reliability of psychiatric opinion in the Royal Air Force.* In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 308-320.—In 541 cases where the same individual was seen by two different psychiatrists, a comparison of the judgments was made. In 81% of the cases the authors report the two psychiatrists agreed in their diagnoses; in 19% they disagreed. A review of the specific diagnosis indicated that the psychiatrists agreed in nearly 90% of the cases with the commonest diagnosis, namely, anxiety state, and in approximately $\frac{1}{3}$ of the cases diagnosed as either depression, hysteria, fatigue or obsessional neuroses. On the whole, agreement tended to be considerably higher in diagnosis than was true in agreement with regard to etiological elements in flying such as flying duty, flying stress and in predisposition to neurosis although there was usually a better than chance agreement indicated. 7 references.—*M. A. Seidenfeld.*

4343. Luzzatto, Alberto. (U. Pavia, Italy.) *Il concetto di "carattere isterico."* II. (The concept of "hysterical character." II.) *Arch. Psicol. Neurol. Psichiat.*, 1948, 9, 183-206.—The author continues his review of the literature pertaining to the concept of hysterical character under the following captions: hysterical character and will; hysterical character

and constitution; hysterical character in relation to age; hysterical character in relation to sex; hysterical character from the viewpoint of heredity; hysterical character in the clinic; the concept of hysterical character in forensic medicine. 88 references.—*F. C. Sumner.*

4344. Meininger, J. V. *Het wezen der zogenaamde functionele of psychogene klachten.* (The nature of the so-called functional or psychogenic complaints.) *Ned. Tijdschr. Psychol.*, 1948, 3, 508-518.—The problem of the nature of the neurotic illness contains the answer in itself: in what proportion are conflict and illness, psyche and morbid symptoms, the psychical and the natural, the ideal and the real? The neurotic illness can not be diagnosed on symptomatology only. In the illness man manifests and hides his existence. Man symbolizes his sufferings as a psychical process in the illness as a natural process. Only for the understanding physician such a syndrome becomes an existential disclosure, a symbol of which he understands the meaning. Consequently the neurotic patient does not demand above all an explanation, but understanding of his symptoms. Real recovery can only be obtained by getting the patient so far that he gives up this way of existence, this insufficient modus of being, that he bears his sufferings again as sufferings, in order to let deliverance of the spirit be possible through spirit.—*M. Dresden.*

4345. Reid, D. D. *Prognosis for a return to full flying duties after psychological disorder.* In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 234-244.—The aim of this study was to determine the quality as well as the quantity of service given by crews on their return to duty. 211 cases were followed up and full details of the type of duty performed were gathered for 204 or 97%. Of those studied, 82% of the cases went back to some form of flying duties after recovery from psychological illness but only 70% of the original series were still employed on these duties at the end of 9 months. The author reports the training wastage in returned cases is twice normal expectation and that the neurotic predisposition of the individual is a determinant in prognosis. Adequate quantitative return in at least non-operational flying is given by returned cases and although the quality of service was difficult to estimate, the author reports that the casualty rate among returned cases is not grossly disproportionate. The breakdown rate, however, is three times normal expectation.—*M. A. Seidenfeld.*

4346. Symonds, Charles P. *The human response to flying stress.* In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 100-116.—This article contains two lectures by the author; the first lecture "Neuroses in Flying Personnel" and the second lecture "The Foundations of Confidence." The author concludes that "the emotional tension resulting from the prolonged exercise of courage is the most important element of stress." Although he considers this factor as most important, he also recognizes such other factors as (1) skill fatigue in

which the loss of emotional control and abnormal behavior are considered to be commonly associated; (2) fatigue of vision and hearing; (3) the effects of acceleration and decompression; and (4) in some instances, the effects of anoxia. As a result of these elements the author feels "there are, therefore, effects of flying stress which the clinician will only see truly when he is guided by the psychologist and the physiologist who, in their turn, may profit from clinical observation. In the study of human response the flying stress collaboration of this kind is essential." 21 references.—M. A. Seidenfeld.

4347. Symonds, Charles P. A series of cases with psychological disorder examined in relation to the problems of selection of flying personnel. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 22-30.—Based on the examination of 100 consecutive records of individuals with psychological disorders in which an attempt was made to assess predisposition and stress. "If a severe degree of predisposition as assessed by this method (clinical examination) were taken as the cause for rejection, more than half of those who broke down before reaching operational squadrons would have been thus rejected, but at the same time nearly a quarter of those who completed more than half an operational tour would have been rejected. If a mild degree of predisposition were taken as ground for rejection, 25 out of 29 of a non-operational group would have been rejected, and 27 out of 35 of the operational group. Eight of these 27 had been awarded decorations." The value of a single psychiatric examination in selection of flight personnel is discussed.—M. A. Seidenfeld.

4348. Symonds, Charles P. Use and abuse of the term 'flying stress.' In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 18-21.—According to this author "there is no justification for the term 'flying stress' as a diagnostic heading and such usage might well have harmful effects of the kind which attended the use of 'shell-shock'." It is suggested, however, that "on the other hand, 'flying stress' might carefully be employed in its original sense to designate the especial strains or stresses to which flying personnel are exposed."—M. A. Seidenfeld.

4349. Symonds, Charles P., & Williams, Denis J. Assessment of temperament in connection with selection of air crews. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 205-224.—Two groups of bomber pilots including 1009 pupils in the Service Flying School and 335 instructors who had completed an operational tour were examined by two psychiatrists working independently and examining half of each group. This assessment revealed a significantly greater proportion of individuals considered to be predisposed to breakdown among pilots under training than among those who had completed their tour of operations. The broad conclusions drawn from the study were that "a method of elimination on the basis of assessment of 'severe predisposition' might be prac-

ticable and profitable. The personality traits investigated can be used with others to simplify and elucidate this assessment although it would not be practicable or desirable to replace the assessment by a trait score." There is also an appendix included covering the psychiatric observers' analysis of their method.—M. A. Seidenfeld.

4350. Symonds, Charles P., & Williams, Denis J. Clinical and statistical study of neurosis precipitated by flying duties. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 140-172.—2200 out of 2919 cases of neurosis in flying personnel were seen by neuro-psychiatrists who considered that these neuroses arose mainly from flying duties. 303 others were seen with neurosis not attributed to flying duties and 416 without neurosis but lacking in confidence. Of the neurosis arising from flying duties, 46% occurred in pilots, 21% in wireless operators or air-gunners, and 14% in navigators. The bomber command contributed 43%, flying training command 20%, and fighter command 9% of these 2200 cases, with one-third of the incidence occurring in night bombers, one-fourth in trainees and 10% each among instructors and day fighters. So far as etiology was concerned, fear was the most important single cause with fatigue playing a subsidiary role when present. Physical injury contributed to neurosis in 18% and illness in 9% of the cases. Nearly 80% of the patients had anxiety states but this seemed to be related most closely to the degree of danger encountered. 38% of all cases of neurosis in flying personnel seen by neuro-psychiatrists were returned to flying duty. In cases where an intermediate assignment to temporary ground duty or limited flying duty 56% returned to flying duty. 17 references.—M. A. Seidenfeld.

4351. Symonds, Charles P., & Williams, Denis J. Critical review of the published literature. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 1-17.—A review of the literature on psychological disorders in air crews with particular reference to (1) general description and symptomatology; (2) aetiology; (3) constitutional predisposition; (4) temperamental causes; (5) flight factors causing psychological disorders; (6) other physical causes; (7) psychological causes; (8) prophylaxis; and (9) selection of flying personnel. 102 references.—M. A. Seidenfeld.

4352. Symonds, Charles P., & Williams, Denis J. Investigation of psychological disorders in flying personnel by unit medical officers. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 82-99.—In contrast to the earlier reports which represent the problems of flying personnel as viewed by neuro-psychiatric specialists, this report covers the problem as seen by the unit medical officer. It presents a picture of how the non-psychiatric medical officer dealt with problems of lack of confidence and neuroses of air crews in the Royal Air Force. Numerous case histories are summarized. With regard to the results of treatment, the authors report that "nearly one-half of the cases treated on

the station returned to flying duties compared with one-third of the cases interviewed by a neuro-psychiatrist".—*M. A. Seidenfeld.*

4353. Symonds, Charles P., & Williams, Denis J. Occurrence of neurosis in Royal Air Force air crew in 1943 and 1944. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 173-177.—A report of a statistical survey of psychological disorders in 1,197 flying personnel occurring during the six months beginning Feb. 3, 1942 and ending August 3, 1942.—*M. A. Seidenfeld.*

4354. Symonds, Charles P., & Williams, Denis J. Occurrence of neurosis in Royal Air Force air crews in 1944 and 1945. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 178-182.—A statistical survey of the occurrence of neurosis in the year ending February 10, 1945.—*M. A. Seidenfeld.*

4355. Symonds, Charles P., & Williams, Denis J. Personal investigation of psychological disorders in flying personnel of bomber command. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 31-64.—A study made "to gain definite evidence as to the incidence and causes of flying stress and to insure that our knowledge of these matters is brought up to date and kept up with current operational experience." Representative stations in each operational group were visited and station and squadron commanders and medical officers were interviewed for the purpose of securing the answer to two basic questions, "What are the things which get people down?" and "How do you tell when a man has had enough?" Among the factors which were observed and reported on are (1) change in appearance, talk and behavior; (2) loss of keenness for flying duties; (3) loss of efficiency; and (4) alcoholic excesses. Flying personnel reported other factors which they observed in themselves including such factors as (1) tendency to exaggerate existing slight disabilities; (2) physical symptoms resulting entirely from mental strain; (3) in some instances, general inability to carry on. The part which the medical officer can play in relationship to detecting the effects of stress and in the regulation of the load factors is discussed and the importance of various factors contributing to the mental and physical strain are discussed.—*M. A. Seidenfeld.*

4356. Symonds, Charles P., & Williams, Denis J. Personal investigation of psychological disorder in flying personnel of coastal command. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 71-81.—Great similarity between the results obtained in bomber and coastal commands are reported because "so many of the duties were undertaken in the same type of aircraft." Numerous factors are discussed including operational limit, operational conditions, physical factors with relationship to different types of aircraft and duties, leadership, success and recognition of success, praise and decoration. Each of these is considered in some detail with particular reference to the part they

play in affecting psychological disorders in this category of organization.—*M. A. Seidenfeld.*

4357. Symonds, Charles P., & Williams, Denis J. Personal investigation of psychological disorder in flying personnel of fighter command. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 65-70.—Loss of efficiency is considered to be more easily recognized in this group than in the bomber or coastal commands. Deterioration in flying, bad landings, general carelessness are other signs of psychological disorder found in fighter organizations. Problems of difficulties peculiar to night flyers are also discussed. Numerous factors such as operational conditions, training experience, discipline, recreation and leave in relation to psychological disorder are presented.—*M. A. Seidenfeld.*

4358. Symonds, Charles P., & Williams, Denis J. Probability of return to full flying of men who have broken down under the strain of operational duties. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 230-233.—80% of a small group of men treated on the station by squadron medical officers are reported as having returned to full operational duties while 48% of a group of 730 flying personnel who had completed more than 100 operational hours and who were referred to neuro-psychiatrists for an opinion during the year February 1942 to 1943 returned to full flying duty. A total of 60% of this group returned to some form of flying duty. Of 272 men in the group who did not show evidence of predisposition to neurosis, 81% returned to flying duties and 71% to full operational flying. The authors conclude "that the most potent factor affecting the return of these men to operational flying appears to be their degree of predisposition to neurosis.—*M. A. Seidenfeld.*

4359. Symonds, Charles P., & Williams, Denis J. Signs of temperamental unsuitability in aircrew under training. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 193-202.—Signs of timidity or nervousness observed in pilots and navigators by over 100 experienced instructors are described and discussed. Suggestions are made of measures that might be taken to improve the technique of eliminating from training members of air crews found temperamentally unsuitable for operational flying and therefore likely to break down or fail under stress. An appendix is included supplying notes for the flying instructors on the methods of recognizing nervousness in pilots under training.—*M. A. Seidenfeld.*

4360. Symonds, Charles P., & Williams, Denis J. Statistical survey of the occurrence of psychological disorders in flying personnel in the six months February to August, 1942. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 117-139.—The number of psychological disorders referred to neuro-psychiatrists in the six months period of this study was 1,197, of which 176 were considered to have no medical disability and were referred for executive disposal. There were twice as many indi-

viduals reported from the bomber command as in the next group, the flying training command. The duties which contributed the greatest number of cases were air crews under training (30%); night bombing (29%); and instructing (11%). Pilots represented 47% of the total; wireless operators and air-gunnery contributed 24%. Anxiety state or depressions were reported alone or together in 88% of the cases and hysteria was present in 12%. In all except four cases, psychological causes were thought to have contributed to the illness, but in 24% physical causes were also present. 97% of those men permanently grounded were considered fit to continue in ground duties while 42% of the total number of patients who had been given a final disposal were returned to flying duties. Nearly 60% of those with psychological disorders gave no history of domestic or personal worries. In 67% of all cases, however, there was evidence of predisposition to neurotic illness which was mild in 52% and severe in 15%.—*M. A. Seidenfeld.*

4361. Williams, Denis J. Predisposition to psychological disorder in normal flying personnel. In *Gl. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 185-192.—Using the same techniques as reported previously (see 23: 4360) 100 normal flying personnel were assessed for predisposition to psychological disorders. It was concluded that this method was capable of indicating a positive liability to these disorders. Approximately 16% of flying personnel show evidence of such predisposition. In 3% the predisposition was so marked that, had it been recognized, the candidate probably would have been rejected at enlistment. Using the same standard of assessment, 68% of flying personnel with actual psychological disorders showed similar signs of predisposition and in 16% of these cases this was reported as severe. The ratio of predisposed in normal and psycho-neurotic air crews is 1 to 4.5. The author concludes that it would be uneconomical to reject any except the severely predisposed which would keep the rejection rate at 3% or less.—*M. A. Seidenfeld.*

4362. Williams, Denis J. Time of recognition of neurosis in flying personnel. In *Gl. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 183-184.—Evidence is presented showing a tendency for men suffering from neurosis to reach a neuro-psychiatrist earlier in their flying career than had previously been the case. In addition, it is reported that neurosis arose less frequently as a result of operational experience.—*M. A. Seidenfeld.*

4363. Winnik, Heintick. On the structure of the depersonalization-neurosis. *Brit. J. med. Psychol.*, 1947-1948, 21, 268-277.—Depersonalization is so common that some writers believe it to be an initial phase in many illnesses. The feeling which worries the patient most is that of estrangement, of being no longer himself. There is increased introspection, such as is found in hypochondriacs. A striking feature is a disturbance in the experience of time. One manifestation is a loss of a chronological order-

ing of events in the patient's biography. The interpretation is made that the symptoms represent primary disturbances of the ego and its functions, whereas in other neuroses ego disturbance is usually secondary.—*E. R. Hülgaard.*

[See also abstracts 4110, 4388, 4463.]

PSYCHOSOMATICS

4364. Dunkel, Mary L. (*Chicago Community Clinic, Ill.*) Casework help for neurodermatitis patients. *J. soc. Casework*, 1949, 30, 97-103.—Observations on the kind of people who develop neurodermatitis and the outstanding emotional factors observed are presented. The impressions are based on casework with 45 patients. The combination of traits often found are emotional immaturity, childish naivete, sexual frigidity, rejection of the female or male role, a history of compulsive work activity, and psychic trauma involving death of a parent or relative. 3 related trends are outstanding: (1) difficulty in establishing useful relationships, (2) a general craving for affection, (3) hostility and thinly disguised depression.—*V. M. Stark.*

4365. Evans, Elwyn. The carotid sinus syndrome. *Geriatrics*, 1949, 4, 90-100.—"Of ten patients with probable carotid sinus syndrome, all had spontaneous syncope as well as vertigo, lightheadedness or staggering. Similar attacks could be reproduced in each by carotid sinus pressure and no other cause for the spells could be found." Nine of the patients were males averaging 57.5 years. In addition to medication, treatment consisted of "explanation of attacks, reassurance and avoidance of undue fatigue, hurry and nervous or emotional strain."—*R. G. Kuhlen.*

4366. Ficarra, Bernard J. The mental attitude of the cancer patient to his disease. *Amer. J. Psychiat.*, 1948, 105, 304-305.—The author discusses the manner in which various groups of people accept the fact that they have cancer. He has found that the young adult accepts the fact of cancer with less emotional upheaval than the geriatric age group. People of Hebrew or Latin extraction are no more emotional about cancer than Nordic individuals, as "the fear of cancer disturbs all patients with equal intensity and severity." After the first shock wears away, the patient usually resigns himself to his fate, and "death's lethal embrace is accepted without mental confusion." The exception to the above rule is usually found among doctors, other professional persons and business executives, as they never abandon the idea of eventual recovery.—*R. D. Weitz.*

4367. Hartmann, E. Les phénomènes psychosomatiques en ophtalmologie. (Psychosomatic phenomena in ophthalmology.) *Ann. Oculist., Paris*, 1948, 181, 588-603.—A review of the ophthalmic effects which may occur in the psychoneuroses, with a series of clinical examples.—(Courtesy of *Ophthal. Lit.*)

4368. Metzger, Frank C. Allergy and psychoneuroses. *J. nerv. ment. Dis.*, 1949, 190, 240-245.—

Observations of records of allergic patients show that at least 50% of asthma and hay fever patients and 92% of giant urticaria patients have psychoneurotic components to their complaints. Reactions from medicines and hyposensitization are believed to be on a fear rather than an allergic basis and show complicating emotional factors. Case histories illustrate the need for recognizing and treating on such a basis.—N. H. Pronko.

4369. Poos, Edgar E. Psychosomatic manifestations in ophthalmology. *J. Aviat. Med.*, 1948, 19, 442-446.—This is a general discussion of some eye symptoms known to have psychosomatic origins.—A. Chapanis.

4370. Wijsenbeek-Franken, C. Enkele opmerkingen naar aanleiding van de zelf-analyse van een asthma-lijder. (Some observations with reference to the self-analysis of an asthma patient.) *Ned. Tijdschr. Psychol.*, 1949, 4, 38-52.—A psychoanalytical approach to the problem of asthma on the basis of auto-biographical data from the work of Marcel Proust. Groen's theory based on his investigation of asthma patients with the method of "biographic anamnesis" is tested in connection with the author's deductions from her material. Typical for this case of asthma are the over-sollicitous, over-protective mother and the consequent hypersensitivity of the child to frustration; further, the regression towards the ambivalence of the pre-Oedipal relationship to the mother from an Oedipus complex that never found its normal development into full heterosexual object love. The different infantile regressions and conflicts in Proust's personality and their expression in his physical and characterological symptoms are further discussed. The contradictory reactions in this case of asthma are pointed out as indicative of a psychic substratum. The disease is further discussed as an expiation of infantile guilt and the double-faced character of its masochistic tendency—self aggrandizement through suffering and masked aggression towards others by the appeal for their love and help—is demonstrated in Proust's behaviour and literary expression.—(Courtesy *Ned. Tijdschr. Psychol.*)

[See also abstract 4279.]

CLINICAL NEUROLOGY

4371. Arnot, Robert E. Clinical indications for pre-frontal lobotomy. *J. nerv. ment. Dis.*, 1949, 109, 267-269.—Abstract.

4372. Bender, Lauretta, & Silver, Archie. Body image problems of the brain damaged child. *J. soc. Issues*, 1948, 4(4), 84-89.—Children with many types of organic brain damage suffer perceptual difficulties and difficulties of locomotion which result in emotional problems. The psychological symptoms are understandable in terms of an unclear image of the body on the part of the afflicted, resulting in an attempt to establish contact with a world which because of perceptual dysfunction eludes him.—L. M. Hanks, Jr.

4373. Bice, Harry V., & Holden, Margaret G. Davitt. Group counseling with mothers of children with cerebral palsy. *J. soc. Casework*, 1949, 30, 104-109.—A summary of discussion in 2 series of 6 meetings given for the purpose of counseling 20 mothers of children with cerebral palsy is presented. The medical, disciplinary, personal, and other problems involved were discussed. The practical suggestions offered were found to be useful to the parents.—V. M. Stark.

4374. Darrow, Chester W. (Institute Juvenile Research, Chicago.) Mechanisms for the spread of epileptic activity of the brain. *EEG clin. Neurophysiol.*, 1949, 1, 25-27.—Vascular changes in the form of increased blood flow are associated with epileptic discharge from the cortex and with local cortical stimulation. These effects are in contrast with circulatory and other conditions associated with petit mal discharges. The spread of slow waves to the point where the cortex discharges *en masse* in wave-and-spike pattern is facilitated by the absence of the intrinsic faster activity of the cortex and is combatted by pharmacological agents which help maintain such resting fast activity. Hypersynchronous 3/sec. waves starting locally spread across the cortex and precede spike and wave pattern; when frontal and temporal regions are involved (with perhaps deeper structures as well) the spike component is triggered off. There may thus be different mechanisms involved in the spread of such differing types of seizure discharge.—C. E. Henry.

4375. Elliot, K. A. C. (Montreal Neurological Institute, Can.) Biochemical approaches in the study of epilepsy. *EEG clin. Neurophysiol.*, 1949, 1, 29-31.—It is possible that epilepsy may be due primarily to abnormal neurons or to normal neurons reacting normally to an abnormal chemical environment. It is unfortunate that so little basic information is yet available as to the role of ACh, K, O₂, CO₂, pH, and glucose in normal and epileptic brains. Research, some of which is reviewed here, on these factors as well as convulsants and anti-convulsants is necessary for an understanding of the chemistry of epilepsy.—C. E. Henry.

4376. Gerard, Ralph W. (U. Chicago, Ill.) Physiological basis of epileptic discharge: closing statement. *EEG clin. Neurophysiol.*, 1949, 1, 53-56.—This is an integration and evaluation by the chairman of a symposium held by the American EEG Society (Separate papers abstracted in this issue.) Heartening progress has been made in the attack on epilepsy—a joint and cooperative endeavor by clinicians and experimentalists although publicity and funds usually accrue to the former rather than the latter. There is elaborated the notion of cortex as cathode ray oscilloscope screen upon which impinge the scanning beam directed upward from diencephalic structures. It is hoped that the phase of simple description of pen wiggles in EEG will give way to more concern with the dynamic events within neurons.—C. E. Henry.

4377. Greenblatt, Milton. The electroencephalogram pre- and post-lobotomy. *J. nerv. ment. Dis.*, 1949, 109, 269.—Abstract.

4378. Hewson, Louise R. The Wechsler-Bellevue scale and the Substitution test as aids in neuro-psychiatric diagnosis. Part 2. *J. nerv. ment. Dis.*, 1949, 109, 246-265.—A system of deviation ratios is used to indicate what combination of abilities and weaknesses show up on the Wechsler-Bellevue scale. Type and ratio scoring procedures yield measures other than total score on the Substitution test. The combined tests are believed to be useful in situations requiring appraisal of cerebral functioning and may be valuable in research regarding the functioning of various brain areas.—N. H. Pronko.

4379. Jasper, Herbert H. (Montreal Neurological Institute, Can.) Electrical signs of epileptic discharge. *EEG clin. Neurophysiol.*, 1949, 1, 11-18.—The negative spike discharge is the only pathognomonic electrical sign of an epileptogenic lesion; this must become rapidly repetitive to give rise to clinical signs. The spread of discharge to distant cortical areas is first manifested by enhancement (rarely depression) of spontaneous background rhythms. Marked electrical changes, particularly of temporal and frontal regions, may considerably precede clinical manifestations; when these involve changes in level of consciousness and automatisms it is probable that subcortical structures are involved. Long reverberating circuits are not necessary for sustained cortical after-discharge, although such may be initiated from thalamic stimulation; subcortical systems can likewise be activated by cortical stimulation. The clinical seizure pattern is not closely related to EEG pattern, but rather to the functional characteristics of the main regions and neuronal circuits primarily involved.—C. E. Henry.

4380. Lennox, William G. (Harvard U. Med. Sch., Boston, Mass.) Influence of drugs on the human electroencephalogram. *EEG clin. Neurophysiol.*, 1949, 1, 45-51.—The interrelationships of pharmacology, seizures and dysrhythmia are discussed. Correlations have been made between clinical and electroencephalographic improvement in 100 patients receiving drug therapy. The two follow a broadly parallel course, changes in seizures and tracings being grouped simply as normal, improved or unimproved. In 66% of 108 periods of treatment, there was complete correlation. In 30% clinical improvement exceeded electrical improvement, in 4% the reverse was true. Clinical improvement and also complete correlation between seizures and dysrhythmia was more evident in patients with petit mal (73% correlation) than in those with other types of seizures (57% correlation). Medication seems to influence seizures, or an 'externalizing mechanism' before it influences the dysrhythmia of an interseizure recording. Broadly speaking, repeated electroencephalograms assist in judging the progress of treatment and the prognosis of epilepsy.—C. E. Henry.

4381. McCulloch, Warren. (U. Illinois, Med. Sch., Chicago.) Mechanisms for the spread of

epileptic activation of the brain. *EEG clin. Neurophysiol.*, 1949, 1, 19-24.—Seizure spread through the brain may occur by 3 different mechanisms. It may be via the fine feltwork of the cortex involving synaptic transmission; the rate of this surface-negative wave spread is very slow (10-30 mm./sec.), though greatly facilitated by strychnine. A second type is via white matter; these surface-positive waves follow cortico-cortical pathways and persist following deep undercutting and "ring" thermocoagulation. A third mechanism involves relay connections via subcortical structures, within which the seizure discharge may persist independently of cortical disturbance. Data are given on which these interpretations depend, as well as a detailed description of the local electrical signs that indicate such activation. Spreading suppression and spreading depression are also described and contrasted; both involve very slow rates of propagation and voltage shift that can be seen only with direct coupled amplifiers.—C. E. Henry.

4382. Meyers, Russell. An oculokinetic test of equilibratory co-ordination having differential diagnostic use. *J. nerv. ment. Dis.*, 1949, 109, 226-232.—On account of the inadequacy of such neurological tests as the Romberg, a more sensitive oculokinetic test is described which also differentiates between infratentorial and supratentorial lesions on the basis of inadvertent head movements.—N. H. Pronko.

4383. Penfield, Wilder. (Montreal Neurological Institute, Can.) Epileptic manifestations of cortical and supracortical discharge. *EEG clin. Neurophysiol.*, 1949, 1, 3-10.—On the basis of evidence derived from clinical observation, electrical stimulation and electrical recording it is apparent that cases of automatism have an involvement of gray matter that is functionally higher than cerebral cortex. This supracortical epileptic discharge is probably diencephalic in origin, is associated with bilaterally synchronous 3/sec. rhythms, and may be inactivated without involving the sensorimotor systems (thus no grand mal attack). In contrast to petit mal and frontal automatism, temporal automatism is associated with a 6/sec. rhythm. A further difference is that in temporal automatism the memory-recording system is paralyzed; thus (in this and also other states of automatism) the condition should be described not as psychomotor but as psychoparetic.—C. E. Henry.

4384. Rose, Augustus S. Some observations on lobotomized patients based upon routine neurologic examinations. *J. nerv. ment. Dis.*, 1949, 109, 201-209.—Routine examinations of approximately 100 lobotomized patients shows that this operation induces (1) a reduction in spontaneous motor activity association accompanied by a short attention span and poverty of mental content, (2) a loss of higher control over reflex emptying of the bladder, and (3) overreaction to painful stimuli applied to the skin. For a few days postoperatively there is a reduction of muscle tone but no disturbances in voluntary movement, perception, or motor coordi-

nation. Inability to inhibit withdrawal reflexes is believed to interrupt pathways involved in the control of some basic reflex patterns.—*N. H. Pronko.*

4385. Toman, James E. P. (*U. Utah, Salt Lake City.*) *The neuropharmacology of anti-epileptics.* *EEG clin. Neurophysiol.*, 1949, 1, 33-44.—This is a review of the mechanisms of convulsive seizures together with the mechanisms of anticonvulsant action. Techniques are given for the evaluation of such drugs, and include the changes in threshold to electroshock, to metrazol, and to hydration. There are tables of useful antiepileptics, their structure, and their protective index. Extensive bibliography.—*C. E. Henry.*

[See also abstracts 3983, 4178.]

PHYSICALLY HANDICAPPED

4386. Barker, Roger G. *The social psychology of physical disability.* *J. soc. Issues*, 1948, 4(4), 28-38.—The disabled child is psychologically handicapped by the greater amount of attention it receives by parents and by interference with normal play; this results in hostility and guilt as well as difficulty in meeting new situations. The disabled adult like ethnic minorities is underprivileged, occupies marginal status, and is constantly facing new psychological situations. These people require help in finding suitable employment and overcoming negative attitudes. They may receive aid through counseling which helps them to accept certain limitations, and to define their area of free action in order to meet marginality and psychologically new situations.—*L. M. Hanks, Jr.*

4387. Cruickshank, William M. *The impact of physical disability on social adjustment.* *J. soc. Issues*, 1948, 4(4), 78-83.—Phenomenally, the physically disabled differ from the normal in that they regard their disabilities as the barriers to moving from old life regions to new ones and are increasingly frustrated by substitute satisfactions. With these many unfulfilled needs they have a feeling of worthlessness. The fact that children feel frustrated also by the over-protection they receive suggests the need for studying not only the life space but the child's concept of himself.—*L. M. Hanks, Jr.*

4388. Cutsforth, Thomas D. *Personality crippling through physical disability.* *J. soc. Issues*, 1948, 4(4), 62-67.—The reaction of the blind to their affliction is disproportionate to the affliction itself. Some react predominately in a compensatory manner with compulsive symptoms, while others react regressively with hysteric symptoms. As neurotics the blind show the typical neurotic manifestations of inadequate emotional response, conversion of tension into anxieties and the fabrication of substitute problems.—*L. M. Hanks, Jr.*

4389. Dreikurs, Rudolf. *The socio-psychological dynamics of physical disability: a review of the Adlerian concept.* *J. soc. Issues*, 1948, 4(4), 39-54.—Alfred Adler's concept of organ inferiority developed from a purely mechanistic explanation of

neurosis to a dynamic sequence where real or conceived organ inferiority is reacted to by compensation in accordance with the individual life goals. Three paraplegic cases illustrate a vengeful, an encysted, and an ambitiously out-going reaction to handicap. Emphasis is on the use to which the individual puts his handicap, molds his environment, and selects from his own native endowment, rather than conceiving these as forces by which he is driven 29 references.—*L. M. Hanks, Jr.*

4390. Hanks, Jane R., & Hanks, L. M., Jr. *The physically handicapped in certain non-occidental societies.* *J. soc. Issues*, 1948, 4(4), 11-20.—Various status positions accorded the physically handicapped are described with special reference to the change in obligations of the group toward the disabled member and the cultural definition of the nature of the handicap. The statuses described are pariah, economic liability, tolerant utilization, limited participation, and laissez-faire.—*L. M. Hanks, Jr.*

4391. Ladien, Gloria; Adler, Dan L., & Dembo, Tamara. *Studies in adjustment to visible injuries; social acceptance of the injured.* *J. soc. Issues*, 1948, 4(4), 55-61.—The reasons for non-acceptance given in interviews by 125 visibly injured patients are: non-injured over-emphasize the limitations of the injured, feel esthetically repulsed and tend to relegate them to a position of lower status. Even when these factors are minimized, visibly injured persons may still feel that the proffered acceptance lacks sincerity.—*L. M. Hanks, Jr.*

4392. McAndrew, Helton. *Rigidity in the deaf and the blind.* *J. soc. Issues*, 1948, 4(4), 72-77.—To test the hypothesis, rigidity is a function of isolation, equal groups of blind, deaf, and normal children were given Rorschach tests and tests for satiation, level of aspiration, and restructuring by classification. Satiation time was shorter for normals than the others, but the blind alone were unable to do undifferentiated tasks. Deaf tended toward wild estimates of performance, while the blind were more than normally depressed by failure. The deaf were unable to restructure a field which the blind were able to do. It is concluded that the blind and deaf show greater than normal rigidity due to blocked possibilities of interaction with the environment.—*L. M. Hanks, Jr.*

4393. Meyerson, Lee. *Experimental injury: an approach to the dynamics of physical disability.* *J. soc. Issues*, 1948, 4(4), 68-71.—The ears of some college students were plugged for 24 hours. Protocols showed regression, aggression, suspiciousness, bluffing, inappropriate behavior, and restlessness. It is concluded that the behavior of physically disabled people receives its character because of atypical life experiences.—*L. M. Hanks, Jr.*

4394. Meyerson, Lee. *Physical disability as a social psychological problem.* *J. soc. Issues*, 1948, 4(4), 2-10.—Physique is not only a biological classification but a social one, and physical disabilities are those particular variations of physique which are

judged negatively by the bearer and people in general, and which limit the activities of the afflicted. Thus the adjustment to physical disability is not solely a personal problem but involves creating favorable social situations for the handicapped. As introductory article to this number of the *Journal of Social Issues on Physical Disability*, the hope is expressed that a theory will develop from the various articles. The articles are then summarized.—*L. M. Hanks, Jr.*

4395. Plata, José. (National School for the Blind, Madrid, Spain.) *La capacidad de los ciegos para la síntesis imaginativa espacial.* (The capacity of the blind for imaginative spatial synthesis.) *Rev. Psicol. gen. apl., Madrid*, 1948, 3, 235-265.—Six groups of blind and seeing subjects totalling 1500 participated in two experiments, the first on the memory of the position of points in space, the second on the imaginative synthesis of spatial forms. The same material was used for all subjects but was presented tactually to the blind and visually to the nonblind subjects. Group comparisons reveal that the tactual image is inferior to the visual image, thus accounting for the poorer performance of the blind subject. With proper training the difference between the two groups disappears. Implications for the teaching of the blind are presented.—*A. J. Smith.*

4396. von Hentig, Hans. *Physical disability, mental conflict and social crisis.* *J. soc. Issues*, 1948, 4(4), 21-27.—Disability is a social role prescribed by a society. Those in this category are generally regarded with disdain and subjected to special treatment. Those in the role respond variously with aggression and withdrawal.—*L. M. Hanks, Jr.*

[See also abstracts 4263, 4421.]

EDUCATIONAL PSYCHOLOGY

4397. Buyse, R. *Théories psychologiques et conceptions pédagogiques.* (Psychological theories and pedagogical concepts.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 463-487.—The author criticizes the widespread failure to discard practices of simplification and fragmentation in education in favor of developing teaching practices based upon the concept that the natural and typical feature of the mental activity of the child is the ability to learn "ensembles." The use of this notion as a basis of pedagogic theory is supported by gestalt theory, and has been recently applied successfully in the teaching of reading. It should be more widely applied to all aspects of the educative process. Bibliography.—*R. J. Ellingson.*

4398. Curran, Clyde Edward. *The significance of a theory of perception in educational practice.* In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 238-240. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4399. Drever, James. *A psychologist looks at the schools for the people.* In *Miscellanea psychologica*

Albert Michotte, (see 23: 4008), 521-528.—The author discusses the alleged defects of the typical school of today, stating that somewhere and somehow the school is failing. This failure is primarily on the social side because socially the school is in an isolated world. By tracing the social development of a child, he shows why the school is at a disadvantage. Remedies for the defects of the school, from the point of view of social development and social education, are reviewed with the conclusion that a solution is not yet in sight to eliminate or reduce the isolation of the schools for the people.—*F. E. Crouse.*

4400. Etienne, Fred, & Kutschbach, Wilhelm. *Zwei Berichte von der Gefangenschaft.* (Two reports from war prison camps.) *Sammlung*, 1949, 4, 120-128.—The first report "Problems in a war prison camp," discusses the time problem in camp. Time no longer has meaning—the duration of internment is unknown; there is nothing to work and to do. A camp college was instituted where all disciplines are taught. No examinations are given, no permission to teach is required; everyone has the freedom to teach and to learn. The second article reports about a teacher's training course which has been developed in an officers' camp in North Africa where the author stayed for four years. The training was only part of training possibilities that were afforded by camp colleges, and it consisted of education in law, medicine, theology, languages, technical sciences, agronomy, forestry, and architecture.—*C. Bondy.*

4401. Harclerod, Fred Farley. *Influence of organized student opinion on American college curricula: an historical survey.* In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 21-25. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4402. Mensing, Angela L. *Use of a detailed outline in the analysis of books most commonly used in basic courses in elementary education.* *J. exp. Educ.*, 1948, 17, 26-91.—From a survey of 341 books used by instructors in 87 state-controlled colleges and universities 26 books on elementary education that were used 10 times or more were selected for detailed analysis and subsequent evaluation. 9 topics with varying numbers of sub-topics were included in the analysis outline. Some of the main topics were (1) philosophy of education, (2) modern social situation and children's social concepts, (3) educational psychology, (4) evaluation of learning. The results of the content analysis are presented in the form of 21 tables. The principal conclusions (1) a detailed outline of contents is a valuable guide in the analysis of books, (2) contents of books in this area are very broad in scope and inclusive of many details, (3) contents of books used in basic courses in elementary education often contain subject matter which may well be placed in books used in other courses; e.g., child development, evaluation of learning, and the teaching of elementary school subjects.—*G. G. Thompson.*

4403. Nechaieva, V. G. *Konstruierovanie v diet skom sadoo.* (Construction activities in the kindergarten.) *Doshkolnie Vospitanie*, 1948, 3, 19-27.—Construction activities in the kindergarten develop creative ability, prospective thinking, concentration powers, perseverance, accuracy, purposefulness. Materials may vary: building material, manufactured "constructs," wood, paper and so-called "discards," such as cardboard boxes, spools, wires, etc. The materials should be chosen with regard to the child's age: simple geometric forms for the younger group, smaller and more complex for the older. The activities must be carefully planned and well motivated. Instructions should be clear, concise, specific, introducing one step at a time. Verbal instructions must be accompanied by demonstrations. Samples may be shown, but not kept in sight. Though deriving from Freobel's methods, construction work in the Soviet kindergarten must depart from the original pedantic orientation, with its emphasis on the construction of abstract and meaningless objects, rendering the activities meaningful, purposeful, and psychologically justifiable to the child, i.e., with a view of meeting its play or practical needs.—M. G. Nemets.

4404. Oesterreicher, G. Sibot haaziva hamukdemet shel bet hasefer haamami. (Early school leaving in Jerusalem.) *L'maan hayeled v'hanoar*, 1948, No. 34. 48 p.—A follow-up study to learn the main factors influencing early school leaving. There are failures in school achievement and remaining a second year in the form. Children of the Oriental Jewish Community incline to fail and to remain a second year, and hence to leave the school more than Occidental ones. Also their IQ is considerably lower. But whereas the social-economical status of these two groups resembles, the difference in IQ and in school achievements tends to be smaller. Hence are derived the most important and efficient ways to improve the school-attendance. There are given some pedagogical hints; the most important—special schools or classes, psychological service, practical (not abstract) trends in teaching.—H. Ormian.

4405. Seamans, Herbert Lee. Policies and practices regarding minority groups in selected colleges and universities. In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 346-352. (*Stanford Univ. Bull.*, 1948, Ser. 8 No. 19.)—Abstract of Ed.D. thesis, 1947.

[See also abstracts 4011, 4246, 4452, 4466.]

SCHOOL LEARNING

4406. Blacow, Joseph David. Sociodrama as a device to aid the beginning teacher in solving the basic problems of classroom control. In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 212-215. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1947.

4407. Clark, Edward L. (*Northwestern U., Evanston, Ill.*) Motivation of Jewish students. *J. soc.*

Psychol., 1949, 29, 113-117.—Scholastic aptitude scores and first semester grades of 10 classes, in the period 1925-1941, ($N = 6,774$) of Northwestern University freshmen were examined to investigate the "belief that Jewish students work more nearly to the limit of their ability in college than do non-Jewish students." Correlations using regression formulae showed that when aptitude scores were held constant, the grade point averages of Jewish men, definitely, and women, probably, were significantly higher than those of the non-Jewish students. The obtained differences between actual and expected grade point averages could not be attributed to errors of measurement or irregularities in grading. The author, therefore, interprets his findings as "compelling evidence" that the Jewish freshmen were more highly motivated than non-Jewish students. He cautions against generalization of the results because the standard error formulas used were based on the random sampling statistics and the class groups studied were "very probably not random samples of intellectual traits of any definable population."—J. C. Franklin.

4408. Cottingham, H. F. (*Florida State U., Tallahassee.*) Paper-and-pencil tests given to students in woodworking. *Occupations*, 1948, 27, 95-99.—The Bennett, Detroit, Mellenbruch, and Stenquist mechanical aptitude tests were administered to 359 seventh grade boys, and the scores correlated with three shop criteria of woodworking achievement. The results are presented in detail, but the general conclusion is that the Stenquist or Detroit tests were most effective as predictive devices.—G. S. Speer.

4409. England, Orvil Charles. Comparative university achievement of students having 11-year and 12-year elementary-secondary school preparation. In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 246-253. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4410. Evans, M. Catherine. (*Indiana U., Bloomington.*) Differentiation of home economics students according to major emphasis. *Occupations*, 1948, 27, 120-125.—The three home economics groups of dietetics, teaching, and merchandising are differentiated by statistically significant differences in the pattern of scores obtained from the Kuder Preference Record, American Council Psychological Examination, California Mental Maturity Test, Cooperative Natural Science test, Minnesota T-S-E inventory, and Minnesota Personality Test. The results are presented in detail.—G. S. Speer.

4411. Galichet, G. Qu'est-ce que lire? (What is reading?) *Psyché*, 1948, 3, 373-376.—This article not only recommends types of reading, but also tells how both oral and silent reading should be done. The practice of reading accurate language, as also that which is the best from the standpoint of semantics, means the acquisition of a vocabulary and style, since one's reading influences one's oral and written expression. Stress is placed on reading that

which is cultural and uplifting, as opposed to the common and often popular writing, since the ultimate aim of all reading is improved intelligence.—*O. I. Jacobsen.*

4412. Hertel, J. P., & DiVesta, Francis J. (Cornell U., Ithaca, N. Y.) An evaluation of five factors for predicting the success of students entering the New York State College of Agriculture. *Educ. psychol. Measmt.*, 1948, 8, 389-395.—High-school grades (based on N. Y. State Regents Examinations) were found to be the best predictor of college grades at the end of the first semester ($r = .525$) for a group of 324 college freshmen enrolled in the N. Y. State College of Agriculture at Cornell University. The second best predictor was the Ohio State Psychological Test which correlated .447 with the criterion. Correlations of the Cooperative Mathematics Test and the Cooperative Natural Science Test with college grades were .251 and .321 respectively. Farm experience showed no significant relationship to the criterion. The authors call for adequate measures of motivation to improve predictions of college success and also, more specifically, for a test that would predict success in college science courses.—*E. Raskin.*

4413. Irish, Mary Elizabeth Herrington. The principles of time and motion applied to the teaching of handwriting. In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 287-291. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstracts of Ed.D. thesis, 1948.

4414. Miller, P. S. (Lincoln U., Pa.) Racial and nationalistic hurdles in the teaching of literature. *J. Negro Educ.*, 1949, 18, 134-137.—The teaching of literature is not free from racial and nationalistic bias and such bias also includes ancient literature. By and large this occurs through tradition and choice of subject matter. Thus Caesar and Cicero are expounded, but more humane and democratic Seneca languishes. Negro students find a hurdle in the acceptance of Latin for aristocratic society and the social institution of slavery are presented. Latin has been identified with the genteel tradition.—*A. Burton.*

4415. Reis, Alfredo. Estudos de investigação psico-pedagógica. Campo de investigação: problemas. (Studies of psycho-educational investigation. Field of investigation: problems.) *Criança portug.*, 1947-48, 7, 241-345.—Examination of 14,563 solutions to arithmetic problems made by 809 pupils of the 3rd and 4th year classes from nearly all the school districts of continental Portugal indicates that most children go through arithmetic operations in a mechanical manner, without insight into the real nature of the operation performed. The difficulty of problems lies more in the mental work than in the number of operations or the number of figures involved. Multiplying and dividing by 10, 100, 1000, etc., is no easier than these operations with other whole numbers. Rules and short cuts should be discouraged since they do not encourage thinking in doing arithmetic work.—*R. J. Corsini.*

4416. Tidwell, Melvin Fred. The psychological aspects and conflicting practices in the methodology of typewriting. In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 369-374. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1947.

4417. Triggs, Frances Oralind. (Educational Records Bureau, New York.) Reading at the college level. *J. higher Educ.*, 1949, 20, 65-70; 112.—Many college students do not possess adequate basic reading skills when they enter college. The skills which must be developed are: word recognition, vocabulary, speed, apprehension of meaning, appreciation. Much of the work in a remedial reading program will have to be done by the specialist. The program will succeed, however, only if it can enlist the support and cooperation of the entire faculty and administration.—*M. Murphy.*

[See also abstract 4102.]

INTERESTS, ATTITUDES & HABITS

4418. DiVesta, Francis J., & Woodruff, Asahel D. (Cornell U., Ithaca, N. Y.) Students' concepts of fraternities and sororities. *J. soc. Psychol.*, 1949, 29, 119-122.—An opinion check list of 15 statements dealing with the effect college fraternities and sororities have on members and non-members, during and after college, was administered to 17 member and 60 non-member college students. The results, showing no significant sex differences, indicated that the members felt "that their organizations [would be] highly beneficial to them socially, financially, and morally in the years after college, although they [were] financially detrimental during college years." Non-members, for the most part, were neutral, believing that fraternities and sororities had neither beneficial nor detrimental effects on them during or after college attendance.—*J. C. Franklin.*

4419. Harless, W. H. A study of accelerated college students. In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 26-32. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4420. Sherman, Arthur W., Jr. (Ohio U., Athens.) Personality factors in the psychological weaning of college women. *Educ. psychol. Measmt.*, 1948, 8, 249-256.—The purpose of this study was to determine the relationship between the degree of emancipation of college women and certain of their own personality traits as well as those of their parents. On the basis of total scores on a revised form of the Emancipation Questionnaire two groups of the most emancipated and least emancipated students (N's were equal to 106 and 102 respectively) were selected and given the Bernreuter Personality Inventory. The parents of the students in these groups also completed this Inventory and the Strecker Questionnaire. Findings obtained showed that the most emancipated women were, on the average, more emotionally stable and more self-sufficient than the least emancipated, but less sociable and gregarious.

Differences between the parents of the two groups were slight and insignificant.—*E. Raskin.*

[See also abstract 4197.]

SPECIAL EDUCATION

4421. Cain, Leo F. The disabled child in school. *J. soc. Issues*, 1948, 4(4), 90-94.—Since physically handicapped children are apt to be maladjusted, school systems draw in professional consultants for diagnosis, but the picture is complicated by the attitudes of school mates, teachers, and parents. As a standard for approaching these problems, the school should admit all who can profit from education, attempt to understand the disabled, provide opportunities for feeling successful, consider in all steps taken the general attitudes of people toward the various afflictions, furnish developmental as well as remedial training and avoid shifting responsibility to special teachers alone.—*L. M. Hanks, Jr.*

4422. Girard, Françoise. Liberté, culpabilité, et création spontanée dans une classe de 6^e nouvelle. (Freedom, criticism and spontaneous creation in a class of untrained pupils.) *Psyché*, 1948, 3, 278-288.—This experiment was carried on with a class of children who were of unstable character, hostile, misfits, and generally maladjusted. A change from the regular class procedure was announced, and the children were permitted to plan and organize their own classwork. This consisted of spelling, story-writing, art, and the regular school subjects. There was a gradual transition, but the children freely criticized their own work, and they also showed great enthusiasm and joy in the work, which was lacking in the old method. Their attitudes toward their work were nearly opposite those they had had when classwork was merely assigned by the teacher. 5 cases are described showing examples of story-writing, family life, and the change in attitude of each pupil. This procedure can be described as psychotherapy and play therapy, and indicates a means of motivating schoolwork.—*O. I. Jacobsen.*

4423. Mauco, Georges. Le Centre Psycho-Pédagogique de l'Académie de Paris au Lycée Claude-Bernard. (The Special Educational Center of the Academy of Paris in collaboration with Claude-Bernard School.) *Psyché*, 1947, 2, 1387-1401.—The functioning of this institution for specially defective children, in cooperation with the Claude-Bernard School was an experimental attempt which has proven so successful that it will be carried on in large scale in the future with many other schools. The author gives the history of the formation of the Institute, its personnel, functions, and the results achieved. There is a detailed presentation of statistics for one year (1946) with the center's 471 children, 340 boys and 131 girls, the problems involved, treatments given, and final disposition and results achieved.—*O. I. Jacobsen.*

4424. Paxton, Mary. Pre-school training for handicapped children. *Publ. Welf. Ind.*, 1949, 59 (2),

8-9.—Pre-school training for handicapped children affords the same values in socialization and adaptation that it does for all young children. In addition special provisions may be made so that the handicapped child may learn to adjust to his handicap. The author briefly describes work done for crippled, deaf, and cerebral palsied children in County Centers in Indiana.—*C. M. Louttit.*

4425. Ramer, Torsten. Die Fürsorge von intellektuell nachgebliebenen Kindern in Schweden. (The care of intellectually retarded children in Sweden.) *Criança portug.*, 1947-48, 7, 71-80.—As early as 1785 in Almånna there existed special wards for intellectually deficient children in the mental hospitals of Sweden. The first Swedish institution for mentally deficient children was founded in 1866 by Emanuela Carlbeck. In this country there were 17 institutions in 1900 and 80 in 1944 for abnormal children. Although the average IQ of children in these homes varies from 70 to 80, children with higher ratings are accepted who have sensory difficulties. Besides classes, there are social functions, physiotherapy, psycho-motor exercises, as well as traveling for resocialization and retraining purposes. 626 children who had attended these special classes were compared with an equated normal group that attended regular classes. Those in the special classes had a higher death rate, lower marital incidence, were twice as likely to be in need of social work assistance, were more likely to enter psychiatric clinics before age 35, but the criminality rates were the same for both groups. Early social prophylaxis for defective individuals is of decided value to society.—*R. J. Corsini.*

[See also abstracts 4280, 4282.]

EDUCATIONAL GUIDANCE

4426. Arnold, Dwight L. (Kent State U., O.) Time spent by counselors and deans on various activities. *Occupations*, 1949, 27, 391-393.—From an analysis of the questionnaire replies of 126 counselors and deans, it is concluded: (1) more time and effort are given to tardiness, discipline, and school failure than are given to counseling about personal, social, vocational, and educational problems; (2) the load carried by many of these persons is very heavy; and, (3) if this group is representative, counseling on vocational, educational, and personal problems must be grossly inadequate.—*G. S. Speer.*

4427. Cheney, Truman. (State Dept. Public Instruction, Helena, Mont.) A method of identifying problems of high school students. *Occupations*, 1949, 27, 387-390.—The responses of 1560 high school students to questionnaires concerned with school and part-school problems indicate that these students have important problems which have been discussed only superficially, if at all. The problems fall largely into the areas of selecting a vocation, training for a vocation, marriage, and getting along with people.—*G. S. Speer.*

4428. Forrester, Gertrude. (West Side High Sch., Newark, N. J.) How to run a "college day." *Occupations*, 1949, 27, 373-380.—A general plan for the organization of college day is given, with a variety of examples of actual practices in a number of different schools. Check lists, forms, and suggestions are shown.—G. S. Speer.

4429. Lovejoy, Clarence E. (College Admissions Counseling Service, New York.) Counseling youth for college. *Occupations*, 1949, 27, 381-386.—The problem of selecting the right college to fit the needs of the individual student are discussed in detail.—G. S. Speer.

4430. Walker, John L. Professional growth through volunteer counseling. *Occupations*, 1949, 27, 401-402.—The writer describes the growth of a volunteer counseling service, begun as a part time activity.—G. S. Speer.

4431. Warren, Sol L. (New York U.) Guidance students get guidance. *Occupations*, 1948, 27, 116-119.—This study presents the method employed and detailed results obtained from a follow-up study of 104 New York University alumni who received degrees in the Department of Guidance and Personnel Administration of the School of Education.—G. S. Speer.

[See also abstracts 4251, 4287, 4291.]

EDUCATIONAL MEASUREMENT

4432. Baier, Donald E. Selection and evaluation of West Point cadets. *Educ. psychol. Measmt*, 1948, 8, 193-199.—The series of studies being conducted by the Personnel Research Section of the Adjutant General's Office on problems related to selecting and evaluating West Point cadets began in 1942 with the construction of a scholastic aptitude test. This test has gone through several editions and its most recent form (WPQ-3) has proved to be a very efficient predictor of academic success at the Academy. Recent studies have been directed toward measuring other significant aspects of cadet selection, such as physical proficiency and adjustment. Research is also in progress on the interrelated problems of developing satisfactory criteria for selection devices and of assessing methods of evaluating cadet performance. Preliminary data are reported on the relationship between the factors making up final cadet standing and success as an Army officer 18 months after graduation as measured by the semi-annual Officer Efficiency Rating.—E. Raskin.

4433. Ley, A. La sélection psychologique des étudiants. (The psychological selection of students.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 513-520.—The author points out the need for selection of students for university entrance and presents a 4-item program for testing which he found helpful, including: (1) an essay article by the student on a given subject which article was judged not only for formal correctness but for the maturity of the

presentation and the form of its exposition, (2) a test of ability to summarize a lecture without benefit of notes, (3) an interview on the student's interests, preferences, plans, with a word-association test as an auxiliary technique, and (4) an intelligence test adapted from Thurstone by Mira, Pieron and Decroly.—R. K. Meister.

4434. Wenger, M. A., Holzinger, Karl J., & Harman, Harry H. The estimation of pupil ability by three factorial solutions. *Univ. Calif. Publ. Psychol.*, 1948, 5, No. 8, viii, 252 p.—Scores on 23 language, non-language, and memory tests for 291 children, ages 10.5-13.5, were intercorrelated and subjected to factor analysis. In a bifactor solution the pattern comprised a general factor, and 3 uncorrelated group factors identified as spatial, verbal, and memory abilities. A multiple-factor method, including both an orthogonal and an oblique solution, described 4 factors in each case. Of these, the first 3 corresponded with the group factors of the bifactor solution, while the fourth appeared related to the analogies tests. The so-called spatial factor represented the ability to manipulate visual imagery. The memory factor was not unitary, but embraced at least 2 components. There was no evidence of either a "power" or a "speed" factor. The general factor and the verbal factor of the oblique solution were significantly related to measures of school achievement and intellectual ability, while the others had little meaning in reference to the available data which included, in addition, chronological age, grade placement, sex, and ratings of ability. 32 references.—R. C. Strassburger.

[See also abstracts 3990, 4086, 4249.]

EDUCATION STAFF PERSONNEL

4435. Anderson, Stuart A. A study of the professional personnel of Wisconsin. *J. exp. Educ.*, 1948, 17, 92-200.—Data on the status of the public secondary school teaching personnel were obtained by means of an unsigned questionnaire which was sent to all but 3 of the 515 public high schools in Wisconsin. Returns were received from 49.8% of the 7,583 teachers and principals contacted. The following types of information were collected: professional training, in-service training, professional books purchased, professional and cultural advantages denied because of position and inadequate salary, certification, membership in professional organizations, home and car ownership, use of summer vacations, class enrollments, teaching plans for next year. Appropriate percentage breakdowns of the data are presented in 89 tables. Numerous generalizations about the professional teaching personnel in Wisconsin are drawn.—G. G. Thompson.

4436. Best, John Wesley. A study of certain selected factors underlying the choice of teaching as a profession. *J. exp. Educ.*, 1948, 17, 201-259.—Information on types of persons choosing teaching as a career, factors responsible for choice of teaching,

and attitudes of these individuals toward teachers and teaching was obtained by a questionnaire and an especially designed attitude scale administered to over 200 University of Wisconsin seniors enrolled in the Department of Education. Detailed results of this inquiry are presented in 34 tables. The following are drawn from the many findings: teaching was ranked second only to medicine in value to society, practice teaching was listed as most valuable in the professional sequence, 3 out of 4 had been advised they would make good teachers, the majority of both men and women made the decision to teach during the college course, genuine interest in children and people was mentioned most frequently as determining the decision to enter teacher training. 65-item bibliography.—G. G. Thompson.

4437. Dodge, Arthur F. (U. Illinois, Urbana.) **A study of personality traits of successful teachers.** *Occupations*, 1948, 27, 107-112.—In a study of 266 high school teachers and 239 Air Corps teachers, the more successful teachers are distinguished from the less successful by being more frequently: social, willing to take initiative and assume responsibility, free from fears and worries, sensitive to and valuing the opinions of others, and slow in making decisions.—G. S. Speer.

4438. Gillette, Benoni Francis. **An evaluation of the teaching performance of student teachers at Stanford.** In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 262-267. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4439. Guilford, J. P., & Comrey, Andrew L. (U. Southern California, Los Angeles.) **Prediction of proficiency of administrative personnel from personal-history data.** *Educ. psychol. Measmt.*, 1948, 8, 281-295.—The usefulness of the biographical data technique in selecting school administrators was studied by giving a 150 multiple-choice biographical inventory (covering the areas of childhood background, professional preparation, health, interests, and early signs of leadership) to over 300 school principals and vice-principals divided into 3 groups. Responses to these items were correlated against job proficiency as determined by superintendents' ratings. Only 8 items in the scale gave significant results in the same general direction for 2 of the 3 groups. Items relating to present interests had no relationship to rated administrative ability. The question of criterion validity is raised as one of the tentative explanations offered for the negative findings. The conclusion drawn is that "the biographical data method has only limited promise of usefulness for the selection of school administrators."—E. Raskin.

4440. O'Reilly, Edmund Paul, & Tudyman, Al. **A performance measure of administrator success in the resolution of teacher problems solvable by consultation approach.** In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 327-331. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4441. Ryans, David G. (U. California, Los Angeles.) **The 1948 National Teacher Examinations.** *J. exp. Educ.*, 1948, 17, 1-25.—The National Teacher Examinations under the sponsorship of the American Council on Education have been conducted annually since 1939. A brief summary of the activities of the National Committee on Teacher Examinations is presented, including teacher selection, examination services, and analysis of the results of the 1948 teacher examinations. Results obtained on approximately 5,000 candidates are presented in tabular form. The findings include: (1) of approximately 4,000 candidates, over 2,600 expressed intentions of spending six or more years at teaching, (2) a majority of the candidates expect to pursue further collegiate study, (3) additional study in "methods of teaching" and advanced content courses appeared, on the basis of self-evaluation, to be most needed, (4) men scored somewhat higher than women, and secondary somewhat higher than elementary school teachers.—G. G. Thompson.

4442. Skeen, Roy L. **The relative value of psychological topics in the education of elementary teachers.** In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 353-354. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4443. Tyler, F. T. (U. California, Berkeley.) **Personality tests and teaching ability.** *Canad. J. Psychol.*, 1949, 3, 30-37.—A study of the predictive value of personality tests for success in practice teaching is reported. 3 tests were administered to a teacher training class. No sub-tests significantly differentiated high and low practice teaching groups, but results seemed to warrant further study. Several limitations to the study are recognized. 15 references.—J. W. Bowles, Jr.

PERSONNEL PSYCHOLOGY

4444. Schell, Henry A. **A study on effort rating.** *Mod. Mgmt.*, 1949, 9(3), 19-20.—Effort rating has been used for years, but its accuracy has always been uncertain. The present study was an effort to train raters into consistency and accuracy. Training was in judging speed of walking, moving the hands in elliptical patterns, and sample piece-work jobs—each done at 100, 80, and 120% pace. Conclusions: (1) some people have an aptitude for rating that is independent of training, (2) almost everyone can be trained to recognize standard, slow, and fast performances, (3) it is more difficult to judge how fast or how slow, (4) any observer is likely to be as much as 15% off, (5) there is a tendency to over-rate slow performances and under-rate speed of very fast ones.—R. W. Husband.

[See also abstract 4211.]

SELECTION & PLACEMENT

4445. Blake, Wainwright, D., & Harriman, Arthur E. (Bucknell U., Lewisburg, Pa.) **The selection**

and training of executives. *J. soc. Psychol.*, 1949, 29, 29-35.—In this general discussion, the authors urge that objective tests and systematized procedures be employed in the selection and training of executives and managers. More important in selection than concrete and practical information (which can be quickly gained from guided experience) are skills in human relations, broad understanding, intelligence, and trainability.—J. C. Franklin.

4446. Humm, Doncaster G. Note concerning "The validity of standard and custom-built personality inventories in a pilot selection program," by Donald E. Super. *Educ. psychol. Measmt.*, 1948, 8, 257-261.—This is a reply to Super's report (see 23: 320) that standard personality inventories have no significant relationship with success in flying training. Several possible explanations for the negative findings on the Humm-Wadsworth Temperament Scale are pointed out: (1) scores on separate components of the scale rather than the relationship among the components were used; (2) distribution of test scores was restricted and skewed; (3) there was no evidence concerning the validity of the criterion. The author also reports some recent studies showing the effectiveness of this scale when used "with due regard to correct procedures."—E. Raskin.

4447. Koerper, E. C. (A. O. Smith Corp., Milwaukee, Wis.) Aptitude testing for engineers. *Mod. Mgmt.*, 1949, 9(3), 14-15.—For proper selection and placement of engineers procedures have had several shortcomings: inappropriate or too technical test batteries, patterned interviews not available, engineering jobs poorly specified, growth factors disregarded, and terminology lacking uniformity. The Engineers Society of Milwaukee has attempted to devise test batteries, build up a standardized interview, develop job-specifications for all engineering jobs, and institute employee progress-appraisal methods. Of 15 factors, 8 are technical, 6 psychological, and one physical. References are obtainable from the author.—R. W. Husband.

4448. McCain, James Allen. The enlisted selection program of the United States Navy during World War II. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 304-311. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ed.D. thesis, 1948.

4449. Manning, R. V., & Yellowlees, L. A. (RCAF Inst. Aviat. Med., Toronto, Canada.) RCAF aircrew selection methods. *J. Aviat. Med.*, 1949, 20, 58-61.—This is a brief descriptive account of selection tests employed in the RCAF.—A. Chapanis.

4450. Page, Howard E. (Sch. Aviat. Med., N. A. S., Pensacola, Fla.) Detecting potential leaders. *J. Aviat. Med.*, 1948, 19, 435-441.—The author discusses a research program now in progress on the prediction of leaders among Naval aviators. On the day before graduation from pre-flight training, each student is asked to name the student under whom he would most like to serve and another student under whom he would least like to serve. A tentative list

of personality characteristics describing high and low nominees is presented. High and low nominees do not differ in their scores on several types of achievement tests or in their academic performance. Student nominations, however, are correlated with the nominations made by athletic instructors, regimental officers, and ground school instructors.—A. Chapanis.

4451. van der Heijden, Ph. M. Iets over de psychologie der functies. (Something about psychology of functions.) *Tijdschr. v. Int. Bedr. Org.*, 1948, 3, 355-365.—For his advising task in engaging personnel a psychologist must realize the industrial psychological factors which are connected with the individual factors of the candidate and which may work activating as well as checking on the development of the person's capacities. Distinguished are: (1) environmental factors: kind of trade, place of establishment, surroundings, mass-production, measure in which the trade is rationalized in technical and industrial-economical respect, influence central management; (2) psychological factors: kind of work (creative, influencing and executing), as a result of which are distinguished 8 function-types and needs which are satisfied by the function (zest for work, diligence, honesty, striving for power, accuracy, etc.) The trade ought to realize which needs are of positive and which of negative worth for the functions to be supplied.—M. Dresden.

[See also abstracts 4347, 4349, 4359, 4432, 4439.]

LABOR-MANAGEMENT RELATIONS

4452. Grambs, Jean Dresden. A psychodramatic approach to the teaching of personnel relations in a course on supervision. In *Stanford University, Abstracts of dissertations, 1947-48*. Stanford U., Calif., 1948, 268-269. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4453. Jenkins, James J. (U. Minnesota, Minneapolis.) Will it be read . . . and understood? *Mod. Mgmt.*, 1949, 9(3), 7-8.—In large companies written communication, especially between management and workers, is necessary, yet differences in background, education, and training often make the writings of one person virtually unreadable by the other. Shorten sentences, substitute simple for complex words, drop useless words and phrases, replace the impersonal by "you," put in logical order, etc.—R. W. Husband.

4454. Kingsland, Keith W. (Kingsland & Marien, Montreal, Can.) Piece-work—and the restriction of output. *Mod. Mgmt.*, 1949, 9(3), 9-11.—Piece-work is always considered synonymous with incentive pay, and is the most widely used incentive method. Commonly an employee will work just up to achieving what he considers satisfactory take-home; then he engages in semi-idleness. Rates set seem to cover two-thirds of workers satisfactorily; the other third find production expectations too liberal or too tight. Individual differences are accentuated; the really good worker produces so much others complain of

sub-par earnings. Adjustment, even to slow-down, is rarely downward; yet new methods and new machinery may produce a gradual speed-up with relatively similar earnings. In the long run, therefore, piece work results in slow-down, which penalizes worker, management, and public. Another incentive form is imperative.—*R. W. Husband.*

4455. Survey Research Center. University of Michigan. Productivity, supervision and employee morale. Ann Arbor, Mich.: Univ. of Michigan, Human Relations, Ser. 1, Rep. 1, 1948. 22 p. (Surv. Res. Center. Stud. No. 6.)—A report on a study of the psychological factors affecting group productivity in the home office of the Prudential Insurance Company as part of a long range research program centering around problems of group motivation. Intensive interviews were held with 742 non-supervisory personnel and other interviews with 73 supervisory and managerial personnel in the latter part of 1947. In general, it was found that first line supervisors in high production work-groups compared with those in low production work-groups revealed that they (1) were under less close supervision from their own supervisors, (2) placed less direct emphasis upon production as the goal, (3) encouraged employee participation in making decisions, (4) were more employee centered, (5) spent more time in supervision and less in straight production work, (6) had a greater feeling of confidence in their supervisory roles, (7) felt they knew where they stood with the company.—*P. S. de Q. Cabot.*

INDUSTRIAL AND OTHER APPLICATIONS

4456. Husband, Richard W. (*Iowa State College, Ames.*) *Applied Psychology.* (Rev. Ed.) New York: Harper, 1949. xiii, 845 p. \$4.50.—"This book, like the first edition (see 8: 1277) is intended primarily as a text for college courses in applied psychology." The major areas covered include: aptitudes and vocations, industrial relations, advertising and selling, psychology in the professions, and practical personal problems. In addition to extensive revision, several completely new chapters have been written a few of which are: Getting a Job, Employment Procedures, The Customer's Side, and Psychological Factors in Marriage. In selecting his material, the author stressed particularly those topics "on which there is abundant experimental literature" in preference "to those still in the discussion and common-sense stages."—*P. K. Hastings.*

4457. Miller, Albert J. (*Ladd Air Force Base, Alaska.*) *Physical fitness for strenuous work in relation to the survival situation in a cold environment.* *J. Aviat. Med.*, 1949, 20, 65-67; 72.—18 men were given physical fitness tests before and after camping out in the cold for periods ranging from 5 to 10 days. Physical fitness scores increased for the 5 men who had adequate diets; scores decreased for the 13 men who had restricted diets.—*A. Chapanis.*

[See also abstract 4002.]

INDUSTRY

4458. Bartlett, F. C. Some problems of "display" and "control." In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 440-452.—Attempting through classical experimental investigation to adapt mechanical and electrical systems to the limitations of the operators, the author and his co-workers have dealt with the various problems of "display" and "control" or mechanical and electrical signals in relation to the operation of machines. Problems of "display" include the detection of alignment and misalignment and the relative importance of the stability of the signal, its size, the background, and the tilt of the panel on which it appears. The operators' thresholds of ability and indifference, and interpretations of other important threshold measures, are "widely valid" only if the results are achieved in the setting of the series. Important problems also arise from the combined functioning of different sensory modes, and the grouping, number and movements of the display signals. Problems of "control" include the reaction and total response times, the effects of serial postural settings on performance, and the steadiness and accuracy which the operator may achieve with ease. Fatigue is considered both as an accumulation of a number of small discrepancies between the operators' immediate goals and actual achievement levels, and as a result of operations requiring the exertion of constant force rather than the maintenance of constant speed. The need for new instrumentation and for methods of measurement in the investigation of "total level of performance" is pointed out.—*H. E. Miller.*

4459. Dael, Jao. van. *Bijdrage tot de studie van de factoren der ongevallen-dispositie.* (Contribution to the study of the factors of inclination for accidents.) *Ned. Tijdschr. Psychol.*, 1948, 3, 450-483.—Researches of Greenwood and Woods, Newbold and others show that the distribution of accidents among workmen, executing the same kind of work under similar circumstances, does not carry an equable character. The inclination for accidents of a person can be described as the total of factors in the individual which determines his probability of hitting. The author gives a survey of experimental researches which have been established in this matter (viz., Marbe, Peter Glück, Farmer, Chambers, Kirk, Lahy, and Korngold). Furthermore he discusses the results which are obtained with the revision of statistics of dockers and which concern the problem whether a relation exists between the inclination for different kinds of accidents. Finally a dissertation about the probable factors of disposition for accidents of dockers is given: poor distributive attention, poor adjustment to avoid accidents, getting too tired, factors of the inclination for losing one's equilibrium, and poor reaction ability.—*M. Dresden.*

4460. Keachie, Edward Chester. *The evaluation of industrial training.* In *Stanford University, Abstracts of dissertations, 1947-48.* Stanford U., Calif., 1948, 17-20. (*Stanford Univ. Bull.*, 1948, Ser. 8, No. 19.)—Abstract of Ph.D. thesis, 1948.

4461. Moore, Wilbert E. (Princeton U., Princeton, N. J.) Current issues in industrial psychology. *Amer. sociol. Rev.*, 1947, 12, 651-657.—Contemporary research and writing in the field of industrial sociology are evaluated under the headings of technical and methodological questions, problems of interests and values arising from the "applied" character of the research, and possible areas of research neglected by industrial sociologists. The general conclusion is that "If industrial sociology is to claim recognition as a field of scientific specialization, it must first of all be sociology [and] it is essential to avoid the pitfalls of random problem-solving, of undisciplined research, and of pointless investigation deriving from a lack of theoretical knowledge and a failure to formulate theoretical problems in ways that they can be subjected to test."—H. H. Nowlis.

4462. Reid, D. D. Fluctuations in navigator performance during operational sorties. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 321-331.—An analysis was made of errors in calculating and plotting wind vectors by navigators carrying out night bomber operational sorties. "By an arbitrary division of the routes to and from the target and plotting the sections where opposition was encountered, it was possible to compare the fluctuations of performance with the times of occurrence of acute hazard." The level of efficiency during operational sorties was lower at all stages than in the non-operational controls, with the average error rising to a maximum during and after enemy opposition and following again on the last part of the route back to the base. The author attributes these fluctuations to anxieties associated with the stress situation and feels that this may account for some of the inconsistencies found in training performance as against operational performance.—M. A. Seidenfeld.

4463. Reid, D. D. Some measures of the effect of operational stress on bomber crews. In *Gt. Brit. Air Ministry, Psychological disorders . . .*, (see 23: 4341), 245-258.—In an effort to find methods of objectively assessing the effects of operational stress on groups of flying personnel, the author tested 3 methods: (1) variations in mean weight during operational flying; (2) sickness incidence; and (3) psychological disorder index. Using these 3 methods the author concludes that there is a significant loss in average weight during the first $\frac{1}{4}$ of an operational tour in bomber command and that no further significant decrease is found to the end of the tour although the average tends to remain below the initial level. It is suggested that this weight loss is due to anxiety associated with operational stress. There is a suggestive but not significant rise in the proportion of men reporting sick coincident with drop in mean weight in the first part of the tour. There is also a significant rise in the relative liability of psychological disorder during the same period of adaptation to stress.—M. A. Seidenfeld.

4464. Walther, Léon. L'horlogerie en face de la psychologie du travail. (Watchmaking in view of

industrial psychology.) In *Miscellanea psychologica Albert Michotte*, (see 23: 4008), 453-462.—Examples are given from experience in Swiss watch-making factories, of the adaptation of tools to the man, making for greater efficiency. Progress along these lines must be a result of collaboration between psychological laboratories and the industries themselves.—R. J. Ellingson.

BUSINESS & COMMERCE

4465. Bryant, W. Baird, Washburn, Stephen L., & Outerbridge, Donald G. (Harvard U., Cambridge, Mass.) Some psychological determinants of the structure of advertising in a classified telephone directory. *Amer. J. Psychol.*, 1948, 61, 540-544.—Two equations were set-up based on the assumption that every advertiser in a telephone directory will purchase an amount of s -space whose cost will tend to vary in direct proportion to the advertiser's net income. The 3 kinds of advertising found in the December 1947, Boston Classified Telephone Directory were analyzed. The n -number of trade-name advertisements of like s -size was inversely proportional to the square of their s -sizes. The combined n -number of block advertisements and pictorial advertisements of like s -size was inversely proportional to s -size. The equations and their graphic representation are presented.—S. C. Ericksen.

PROFESSIONS

4466. Smith, Robert Ora. (U. Michigan, Ann Arbor.) Factors affecting the religion of college students; a study of personality and cultural factors affecting the religion of college students. Ann Arbor, Mich.: Author, Lane Hall, U. Mich., 1947. ix, 194 p. \$1.50.—Part One reports a questionnaire study of 140 Yale Divinity students from twelve Protestant denominations showing that 65% come from Protestant church related colleges and universities, where they participated in an average of 4.3 secular and 2.3 religious extra-curricular activities, and 70% majored in history, religion, sociology, philosophy, or English in that order. Among positive and negative religious influences professors ranked highest in both. Most frequent factors leading the men to go into religious work are (1) sensitivity to the need, (2) personal influence of friends and leaders, (3) activities of church and religious groups, (4) influence of family (5) development of a strong faith in Christian life and belief. Part Two reviews other investigations of personality and cultural factors upon the religious knowledge, attitudes, beliefs, and practices of college students. Extensive bibliography.—P. E. Johnson.

4467. Waddington, Miriam. (McGill U., Montreal, Canada.) The student unit: some problems and psychological implications. *J. soc. Casework*, 1949, 30, 113-117.—The problems of control and position of a unit supervisor who is placed in an agency by a school for the purpose of teaching a student unit is pointed up.—V. M. Stark.

[See also abstract 3990.]

THE PSYCHOLOGICAL INDEX

The Psychological Index is a bibliography of psychological literature which was published annually for the American Psychological Association from 1895 to 1936. Thirty-one of the forty-two volumes are still available. Eleven are out-of-print. The remaining issues are priced at \$2.00 per volume, and sold in sets or separately. Ten per cent discount is given on orders over fifty dollars.

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